

A STUDY OF CONTEMPORARY
LEADERSHIP MODELS IN CPA
FIRM AUDIT TEAMS

By

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The applicability of certain behavioral and situational leadership studies models was tested using audit teams from a national CPA firm engaged in field work.

Leader behavior predictor variables were measured using an adaptation of the Fox Modified Leader Behavior Description Questionnaire. They included Consideration, Initiating Structure, Consultative-Participative Decision-Making, Work Facilitation, Decisiveness, Goal Emphasis, Leader Support, and Management of Rewards and Punishment. Situational characteristics measured among team subordinate members included Pressure, Task Certainty, Need for Information, Organizational Independence, and Intrinsic Job Satisfaction. Global assessments were obtained for team performance from

supervisors and for job satisfaction from members. Additionally, a measure of subordinate dissatisfaction was obtained by using the shortfall between the expected leader behavior and actual leader behavior item scores on each individual team member's Fox Modified Leader Behavior Description Questionnaire. Each team leader completed the 32-item Fox Least Preferred Coworker (LPC) instrument.

Consideration, Leader Support, Work Facilitation, and Decisiveness showed a significant negative correlation with Dissatisfaction. Work Facilitation correlated positively with Performance. Significant negative correlations were found between LPC and Performance when leader member relations were moderately poor (Octant VII). A factor analysis of the Fox Modified Leader Behavior Description Questionnaire results yielded a three-factor solution. None of the derived factors approximated any of the predictor variables previously measured.

Based upon the results of this study, none of the models tested appeared to be notably applicable for predicting outcomes in terms of audit team satisfaction and performance. It was also concluded that situational factors may exert a stronger influence on audit teams than on more homogeneous groups engaged in less complex tasks.

CHAPTER I

THE AUDIT TEAM AND ITS ENVIRONMENT

The Audit

Such diverse services are performed by certified public accountants in both the private and public economic sectors of the United States that it is necessary to place a boundary around those areas of public accounting which are to be considered in this study. The primary service performed by CPAs is discussed in the following:

The objective of the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they present financial position, results of operations, and changes in financial position in conformity with generally accepted accounting principles. [AICPA SAS No. 1, 1973, p. 1].

This examination of financial statements will subsequently be referred to as an audit.

The primary role of auditing has been described as "to improve the usefulness of decision-making information" [PM & M, 1976, p. 2], and the fundamental type of decision-making which auditing facilitates is the allocation of scarce resources in a society. This role is not restricted by type of economic system or organizational structure, since information that is improved in terms of accuracy, timeliness, understandability, or specificity should enable better choices to be made both in terms of attracting capital from

investors and distributing internally generated funds among alternative uses.

The Audit Team

For the purpose of this study, it was determined that there exists a standard organizational structure used by the tested CPA firm on all annual audits despite the fact that each annual audit is a unique case. Notwithstanding this uniqueness, there are common elements of organization which may be observed in the firm tested and in comparable CPA firms.

One member of a firm will normally retain overall responsibility for an audit. This is generally that individual who assumes the primary role in maintaining communications with the client and negotiates the particular services which the firm will provide as well as the billings for those services. This individual is normally a partner in the CPA firm. The key role element is the entrusted authority and responsibility for providing services to particular clients. The partner will not normally take an active part in the routine audit work (nor should he if he is to be an objective reviewer of the audit evidence). Consequently, a manager is appointed to organize specific client services and an "accountant-in-charge" (AIC) is appointed for the field work phase of the audit. The AIC generally prepares and administers an audit program which, when effectively carried out, will provide sufficient evidence for the CPA firm's

publication of an opinion regarding the client's financial statements.

The AIC should be an audit staff member with sufficient experience and ability to effectively plan the nature and the extent of the audit tests and supervise the work of the subordinate audit staff members while they are occupied with this audit engagement--both in the field and in the CPA firm's office.

It is the AIC position which is of primary interest in this study. An AIC will customarily be delegated extensive discretionary authority in an engagement as long as it seems apparent that satisfactory results are being achieved. The competent AIC will, quite literally, handle an entire audit engagement.

The number of assistants assigned to an audit engagement is not necessarily stable and may fluctuate during the course of the engagement depending upon the audit procedure being conducted. For instance, a large group may be temporarily required to observe and review a client's count of year-end inventories. There is, however, a tendency to assign audit assistants to engagements for the duration where feasible. This tendency endures in practice because of the learning period required for an assistant to master a client's employees and the other members of the audit team.

Many audit assistants are quite limited in their work experience and may have little more than their university

education and the CPA firm's indoctrination course to serve as a basis from which to perform audit tests.

Since formal educational programs are, of necessity, general in the type of knowledge that they convey, the audit assistant finds that during the early stages of his career there is a continual need for counsel as new situations are encountered. As staff assistants become experienced, they may be expected to perform work requiring the exercise of professional judgment. During periods when a CPA practice experiences rapid expansion, staff assistants will advance rapidly in terms of the degree of responsibility demanded by work assignments and may find themselves working at the limit of their acquired skills.

On the typical audit engagement, staff assistants must work with the AIC and their colleagues in order to make a useful contribution to the audit. The degree of this interdependency should be evident in the character of the relationship between a staff assistant and the various other members of an audit team. Whereas most work assignments on an audit do not require assistants to work in unison with each other, the overall coordination of an audit team is vital to effective performance if individual assistants are not to interfere with the work of others and avoid needless duplication.

During the course of an audit there may be instances where the members of the team are unable to perform certain procedures or provide required services because they lack

sufficient technical knowledge. To fit this need, most CPA firms employ "specialists" for aid when these situations arise. These employees specialize in computer technology, personnel evaluation and placement, tax planning, SEC reporting, or some other area of concern to the audit team. Generally specialists serve on an engagement to the extent that their expertise is needed. In his relationship with the AIC, the specialist resembles an internal consultant, not a subordinate. Since this study will concentrate on the interplay between group leader and subordinates, the specialist will not be included as a team member.

The Phases Of An Audit

There are three readily identifiable phases in an annual audit. Each has implications with regard to supervision to staff assistants. First, there is a planning phase in which a CPA firm manager and the accountant-in-charge decide the manpower needs of the audit and establish deadlines for the completion of certain portions of the audit work.

The second phase is where the AIC and his assistants perform field tests to gather evidence which will enable them to form an opinion as to the appropriateness of the client's financial report. In this phase the audit "team" is functioning and, it may be assumed, perceptions of leader behavior become measurable. This is the phase which provides the basis for the measurements in this study.

The third and final phase of an audit engagement normally takes place in the CPA firm's office after the field work has been completed. The working papers are assembled, checked, and reviewed. Normally, a smaller staff is required in this phase than during the preceding field work phase. If no gaps remain in the network of evidence that has been gathered in accordance with the audit program, the CPA firm will issue an auditor's report and the audit team will be disbanded.

Audit Team Leadership Research

The relative importance of leadership in the audit team context has not been documented. In this study an attempt is made to eliminate this void. Accordingly, this study concentrates on groups engaged in annual audits during the field work phase. It seeks to determine the applicability of certain theories which purport to explain the effects of leader behavior on group performance and on group member satisfaction.

It is expected that practitioners may benefit from this research in several ways. It could enable them to discover possible sources of employee dissatisfaction which results in unnecessary staff turnover. It could point to leader behavior which tends to be associated with high quality work. Certainly, improvements in audit team performance in an absolute sense eventually reflect favorably upon the CPA

profession as a whole by reducing the possibility of inappropriate auditor's reports.

Perhaps the most positive aspect of this research is in its potential for improving team efficiency. Efficiency of operation is as important in a service-oriented CPA firm as it is in a manufacturing firm. It is more difficult to measure efficiency when output is not in the form of units of standard quality and specification. A layman may assume that if one AIC required five hundred man-hours for an annual audit and another completed the annual audit in a subsequent year in eight hundred man-hours, the AIC using the fewer hours was the more efficient. An experienced reviewer of annual audits would be quick to point out that the man-hours expended in an audit was seldom a measure of efficiency even when a standard audit program is used by and the experience level and competence of the audit teams are comparable.

Each annual audit is unique. Efficiency in field work is a long-range necessity for CPA firms. There are constraints in terms of the fees a client will pay. There is also a time constraint in field work created by the necessity to simultaneously divide the firm's professional staff among numerous clients. Further need for efficiency is generated by the deadlines which exist for the publication of financial statements and other documents which may rely on the same financial data (SEC reports and tax returns).

The limited time span of an audit team's existence obviates the need for a longitudinal measurement of the possible

effects of alternate leader behavior on group performance and subordinate satisfaction. Although leadership researchers have pointed to the necessity for longitudinal studies [Fox, 1976a; Fox, 1976b, Franklin, 1975; Likert, 1967] due to an apparent time-lag between changes in supervisory behavior and lasting changes in subordinate performance, the temporary nature of an audit team rules out this consideration. Clearly, in this respect, an audit team should have more similarity with the laboratory study groups and temporary military groups which have provided much of the support for leadership models. It is the temporary change in group behavior which is the appropriate criterion in studying audit teams.

An audit team is a group in which the leader (AIC) normally wields extensive authority relative to his assistants and the extent to which the task of the group is structured is quite low. Very little leadership research has been published on groups of this type. Two studies were reported by Fielder 1967, p. 129 and "the data obtained in these studies are quite weak." This study, then, concentrates in an area that has been neglected.

The foregoing provides the background information necessary to consider the effects of leader behavior on performance and satisfaction measures as applied to groups engaged in annual audit work in the field (audit teams). Subsequent chapters will briefly review the research to date in leadership and show how it was applied to audit teams in this instance.

CHAPTER II

LEADERSHIP STUDY MODELS

The primary objective of this study is to determine the applicability of certain contemporary research models and techniques used for understanding leadership in formal organizations for groups engaged in the field work phase of annual audits. It is expected that the results should indicate whether certain preoccupations in leader behavior and attitude have noticeable effects on assessments of group effectiveness and various individual measures of job satisfaction. The major approaches to the study of leadership have been classified by Filley et. al. [1976] into three categories--trait, behavioral, and situational.

The trait approach is based upon the assumption that an individual's behavior can be attributed to certain distinctive psychological or physical characteristics. Certain identifiable traits differentiate successful from unsuccessful leaders to proponents of this approach. Traits cannot be directly observed, but conceptualizations can be measured which may approximate traits. For example, "I.Q." tests are available which some presume to measure an approximation of an individual's intelligence.

Filley et al. [1976, p. 219] state that "the weight of evidence pertinent to the trait approach does not lend

strong support to it." They conclude that the proposition that there are a finite number of identifiable characteristics or traits which differentiate successful from unsuccessful leaders is insufficiently supported by the research conducted to date.

The behavioral approach to the study of leadership as defined by Filley et al. [1976] is based upon the assumption that leaders may be characterized by readily observable behavior patterns. These patterns, in turn, may be categorized into four types: supportive, participative, instrumental, and "great man."

Examples of supportive leaders would be individuals who rate high in Consideration (Ohio State Leadership Studies Model) or Leader Support (Fox Normative Model). These leaders treat their subordinates in ways which increase their positive feelings toward their jobs. That is, they praise workers for good performance, avoid authoritarian behavior, and adopt a posture of thoughtfulness and sincerity in their interactions with subordinates.

In their summary of the empirical evidence as to the effectiveness of leaders characterized by considerate-supportive behavior, Filley et al. [1976, p. 222] conclude that "supportive leadership is often effective, resulting in improved subordinate attitudes, satisfaction, and performance." However, the studies reviewed could not be construed as to substantiate the proposition that effective leaders are characterized by supportive behavior because of the effects of

individual, task, and environmental variables. The authors also point out that "much remains to be learned" with regard to the question of causality--studies have shown that supportive leader behavior positively affects subordinate satisfaction and performance and other evidence suggests that supportive behavior may be the result of subordinate satisfaction and performance.

Participative leaders are those who use participative decision making and supervision techniques. Such leaders would rate high in Consultative-Participative Decision Making (Fox Normative Model). In their review of the studies dealing with participative leadership, Filley et al. [1976, p. 229] state that although findings suggest that participative leadership is often effective, the proposition that effective leaders are characterized by participative decision making and supervision "cannot be said to be confirmed, because there is ample evidence that the effects of participative leadership are not omnipotent." They cite the necessity for the leader to be otherwise skilled in the performance of his task, for subordinates to be in favor of participation, and for the task to be a complex one requiring a high quality decision or subordinate acceptance of the decision--or a combination of both. As was the case with supportive leadership, situational variables must be considered in the evaluation of participative leadership findings.

Instrumental leadership is based upon the management activities of planning, organizing, controlling, and coordinating the work of subordinates. These activities are presumed to be "instrumental" in achieving group accomplishment of organizational activities. Leaders rating high in Initiating Structure (Ohio State Leadership Studies Model) or Work Facilitation (Fox Normative Model) represent instrumental leaders.

Empirical evidence with regard to the effectiveness of instrumental leadership in promoting group performance and satisfaction criteria does not fully support the proposition that instrumental leaders are effective leaders. Kerr et al. [1974] reviewed the results of studies where Initiating Structure was measured and concluded that it was only effective in situations where there was outside pressure, where the task was satisfying in itself, where subordinates perceive high labor mobility for their skills, and in other specific situations.

"Great man" leaders are characterized by both supportive and instrumental leadership behavior. Presumably the leader faces conflicting demands from the two levels that he works directly with--subordinates preferring supportive behavior and superiors preferring instrumental behavior. Filley et al. [1976, p. 233] question whether it is possible for a leader to exhibit both behavioral styles. They feel that the proposition that "great man" leaders are effective is only partially supported by the empirical literature and that situational factors come into play on the two components of "great

man" leadership (supportiveness and instrumentality) in the same fashion as they might for supportive of instrumental leadership.

Situational leadership approaches have been used to eliminate the major weakness of the behavioral approaches just mentioned--oversimplification due to the failure to consider the moderating effects of situational factors. Contingency theories have been proposed by Fiedler [1967], House [1971], and Vroom and Yetton [1973], among others. These as well as certain specific behavioral models will now be summarized.

The Ohio State Leadership Studies were undertaken by an interdisciplinary group working within the Bureau of Business Research of the Ohio State University. An eight step research plan was adopted and reported in the monograph, Methods in the Study of Administrative Leadership [Stogdill and Shartle, 1955]. Two of the eight steps--the steps of greatest interest to this study--called for descriptions of actual leader behavior by both group leader and group members and measures of individual leader and group effectiveness. Two basic hypotheses were proposed with regard to leader behavior: (1) the patterns of behavior in a given leadership position will be determined in part by the performance demands made upon that position and (2) the leader's behavior is related to (a) status in the organizational hierarchy, (b) structure of interactions among organization members, (c)

responsibility-authority structure of the organization, and (d) performances of members of the organization.

Hemphill and Coons [1957, p. 7] report that the problem of obtaining leader behavior descriptions was met by developing a methodology designed to answer a primary question, "How does this leader operate?" The instrument that evolved consisted of a set of questions which would enable researchers to isolate and classify the relevant forms of behavior exhibited by an individual when directing the activities of a group toward a shared goal. Nine dimensions of behavior were tentatively selected: integration, communication, production emphasis, representation, fraternization, organization, evaluation initiation, and domination. Using these dimensions, a large number of items were constructed and refined [Hemphill and Coons, 1957, p. 9]. Among the several criteria used for item selection were insistences that only specific behavior as opposed to general traits or characteristics be described, that an item be limited to one unit of behavior, that an item not be emotionally or evaluatively toned, and that the times be applicable to many different organizational structures, groups, and situations. An initial factor analysis of the intercorrelations of the dimensions of the Leader Behavior Description Questionnaire (LBDQ) conducted by Hemphill and Coons [1957, p. 24] yielded factors labelled Maintenance of Membership Character, Objective Attainment Behavior, and Group Interaction Facilitation Behavior. The first is based

on leader behavior that is socially agreeable to group members while the other two are based on leader behavior which structures group activities and communications.

Another factorial study utilizing the LBDQ was carried out with air crew commanders by Halpin and Winer [1957]. They accounted for 100% of the common variance with four factors which were designated Consideration (49.6%), Initiating Structure (33.6%), Production Emphasis (9.8%), and Sensitivity (7.0%). The subsequent working model of leader behavior which evolved from these Ohio State studies concentrated on the first two factors. Consideration (C) is described as leader behavior reflecting friendship, mutual trust, respect, and warmth. Behavior on the part of a leader which organizes and defines relationships, defines roles, and clarifies how to do jobs is classified as Initiating Structure (I.S.).

The bulk of the early studies utilizing the LBDQ were based on hypotheses such as supervisors rate favorably the performance of leaders who show high I.S. behavior; subordinates prefer as leaders those who show high C behavior; and leaders getting highest effectiveness ratings score above the mean in both leader behavior dimensions while leaders getting lowest ratings score beneath the mean in both dimensions [Halpin, 1957]. The results of these studies did not lend themselves readily to generalization due to the organizationally specific nature of most leadership positions. Jacobs [1970, p. 33] concluded: "These studies demonstrate

that situational variables influence the balance of leader behavior that will be desired (or best)."

Stogdill [1974, p. 427], one of the developers of the LBDQ, has cautioned researchers about placing too much emphasis on C and I.S. and other frequently used measures:

A small number of variables (authoritarianism, democratic leadership, consideration, initiating structure, and LPC, for example) has been overworked at the expense of the other variables that are equally important and about which little is known.

However, Stogdill [1974, p. 428] does reaffirm the key belief that there is a functional dependency between leader behavior and group performance and emphasizes the situational nature of such behavior:

The leader is required to (1) maintain role structure and goal direction, (2) provide for role freedom and group drive, and (3) maintain group cohesiveness and norm conformity. The behaviors that produce these outcomes differ from group to group depending upon variations in member characteristics, task characteristics, and group characteristics.

In an effort to encounter criticism that the Ohio State Leadership Studies ignore situational variables, Kerr et al. [1974], by reviewing published findings utilizing the Leader Behavior Description Questionnaire, were able to develop ten situational propositions and two general postulates of leadership effectiveness. The variables which were hypothesized to have a moderating influence between C and I.S. and satisfaction and performance criteria were subordinate need for information, job level, subordinate expectations of leader behavior, perceived organizational independence, leader's

similarity of attitudes and behavior to managerial style of higher management, leader upward influence, and the task characteristics of pressure and intrinsic satisfaction. The adaptation of these situational variables into the Ohio State Leadership Studies tends to reconcile that massive body of work with the other contemporary leadership studies.

House and Dessler [1974] have revised and extended House's [1971] Path-Goal Theory of Leader Effectiveness which attempts to explain the effects of intermediating (situational) variables in the relationship between leader behavior and performance and satisfaction measures. The leader is viewed as one whose function is motivational--to increase personal payoffs to subordinates for work goal attainment and to facilitate the ease with which subordinates may travel the path to goal attainment. They contend that the specific leader behavior necessary to perform this motivational function is determined by (contingent upon) the situation in which the leader operates.

House and Dessler [1974, p. 31-2] mention two classes of situational variables: (1) the characteristics of subordinates and (2) the environmental pressures and demands the subordinates must cope with to accomplish work goals and satisfy their own needs. One subordinate characteristic is the degree to which leader behavior is perceived to be either a source of immediate satisfaction or instrumental to future satisfaction. The other characteristic is the subordinates' perception of their own ability with respect to task demands.

Environmental moderators proposed by House and Dessler were the subordinates' task, the formal authority system of the organization, and the primary work group. They suggest that the effect of the leader on the subordinate's motivation will be a function of how deficient the environment is with respect to motivational stimuli, constraints, or rewards.

The leadership studies undertaken at the Survey Research Center of the University of Michigan share certain similarities with the Ohio State Leadership Studies. The Survey Research Center methodology also relies upon the position that leadership amounts to a large aggregation of separate behaviors [Bowers and Seashore, 1966, p. 240]. The basic differences between the two research methods are in how aspects of leader behavior should be grouped and classified. There are four dimensions emphasized in the survey Research Center Studies: (1) support, (2) interaction facilitation, (3) goal emphasis, and (4) work facilitation. These are based on an integration of research results and writings by Katz and Kahn, Cartwright and Zander, Mann, and Likert [Bowers and Seashore, 1966, 247]. The Survey Research Center methodology measures aspects of behavior which represent supervisory and peer leadership. The Ohio State Leadership Studies concentrate on the leadership provided by one leader in a group.

A standardized questionnaire has been developed based on the four factors proposed by Bowers and Seashore [Taylor and Bowers, 1972]. It is a machine-scored instrument which measures support, goal emphasis, work facilitation, and

interaction facilitation for both supervisory and peer leaders. Also measured are various assessments of individual satisfaction (with peers, with supervisor, with job, with the organization in relation to others, with pay, with current progress, and with future prospects). The entire questionnaire contains twenty-four short questions, thirteen of which measure the four leadership factors.

Taylor and Bowers [1972, p. 55] initially administered the Survey of Organizations to the employees of an oil refinery (N = 325), and, after excluding three questions from the set, obtained Spearman-Brown reliability coefficients of from .85 to .91 for the four leadership factors. An analysis was made to determine if there existed a single general factor for supervisory leadership of sufficient magnitude to invalidate the four factor construct. It was concluded that the general factor content was not large enough to regard any of the four proposed factors as interchangeable measures of a single leadership factor and that each of the four contained sufficient unique variance to be considered a measure of some distinguishable aspect of leadership.

Studies initially undertaken by the Group Effectiveness Research Laboratory at the University of Illinois are based on Fiedler's Contingency Model which suggests that changes in group effectiveness from one situation to another, where leadership style is held constant, depend upon the favorability of the situation [Fiedler, 1967, Fiedler and Chemers, 1974]. The binary factors which determine situation

favorability are (1) leader-member relations (good, poor), (2) task structure (high, weak), and (3) position power (strong, weak). The eight combinations of these factors form eight cells in Fiedler's classification of group situations. Four criteria are used to determine the degree of task structure: decision verifiability, goal clarity, goal path multiplicity, and solution specificity. Leader-member relations are based upon the degree of acceptance the leader obtains from his group. Position power is related to the extent to which the leader can reward and punish his subordinates.

The measure used to classify leadership style in Fiedler's Contingency Model studies is the Least-preferred Coworker (LPC) score. This is obtained from a sixteen scale semantic differential instrument [Fiedler, 1967, p. 269]. The bipolar scales have eight positions that may be selected by the respondent from least favorable to most favorable. The usual scoring is one point for the least favorable position up to eight points for the most favorable position. The total score for a given leader is the summation of the scores for every item. A high score on the LPC instrument, in relation to a given norm, reveals a leader who holds his least-preferred coworker in higher regard than low scorers. Fiedler [1967, p. 46] hypothesizes that:

High-LPC leaders are concerned with having good interpersonal relations and with gaining prominence and self-esteem through these interpersonal relations.

Low-LPC leaders are concerned with achieving success on assigned tasks, even at the risk of having poor interpersonal relations with fellow workers.

When the situation is favorable for the leader in terms of control and influence, Fiedler and Chemers [1974, p. 77-8] argue that a leader will pursue his secondary goals:

. . . the high LPC leader will concern himself with such status-enhancing activities as ordering people around, assigning tasks, and assuming responsibility. The low LPC leader, given this high degree of control, will be relaxed, friendly, and considerate, in the knowledge that the task presents no problem.

In situations where the leader control is low (unfavorable situations), Fiedler and Chemers [1974, p. 78] hypothesize that each leader will revert to his primary goal: the high LPC leader will seek to enhance relationships with group members; the low LPC leader will concentrate on getting the task accomplished at the expense of good interpersonal relations, if necessary.

A normative decision-making model based upon organizational psychology has been proposed by Vroom and Yetton [1973], who had found significant variation in the amount of participation that was perceived as necessary by managers in given problem situations. Their model is based on the assumption that the most appropriate unit for the analysis of a situation requiring the exercise of leadership is the particular problem to be solved and the context in which the problem occurs. The discrete social processes by which organizational problems are translated into decisions form the basis for prescribed leadership styles which vary in the amount of

subordinate participation. Vroom and Yetton describe five decision methods for group problems varying from a completely autocratic decision style to a group generated decision style. To make the model operative, a list of questions are provided for the leader to consider in diagnosing a particular problem before choosing a decision style. Heller [1973] independently developed a similar model and reached similar conclusions.

Bass and Valenzie [1974] have proposed a Systems Model of Leadership in which the system outputs (effectiveness and employee satisfaction) are to be explained by systems inputs (organizational, work group, task, and subordinate personality variables), system relations (power distribution information distribution, and work group structure and objectives), and managerial styles (directive, manipulative, consultative, participative, and delegative). They have hypothesized that the directive style should be most effective when the leader has high power and information distributions; the delegative style, when low. Participation is hypothesized to be most effective when the leader and group members have equal information. Consultation was proposed for situations where the leader has high power but low information and manipulation for low power-high information situations.

One of the recurring difficulties in leadership studies is the isolation of significant moderator variables and the statements of their effect. In addition to the variables

isolated in the contingency models of Kerr et al. [1974], Fiedler [1967], Vroom and Yetton [1973], House and Dessler [1974], and Bass and Valenzie [1974], as already discussed, there have been numerous studies purporting to show the mediating effects of additional variables on measures of satisfaction and performance.

Bowers and Seashore [1966, p. 257] found that the best "predictor" of three out of four peer leadership variables was the same variable as measured for the group leader, indicating a relationship between the two. Certain writers cited by Greene [1976, p. 65] have argued that subordinate behavior may cause variance in leader behavior in opposition to the usual pattern of causality assumed in leadership studies. Fox [1976a, p. 6] has cited performance and satisfaction of his subordinates are moderated by the behavior of higher level management.

The moderating effects of group member personality differences have been discussed by Korman [1974, p. 192] and Fox [1976a, p. 6]. Korman believes that personality differences may prove to have significant moderator effect if the personality constructs used are situationally defined and the measures construct validated. Korman believes that care in these areas will eliminate criticism based on evidence personality test unreliability over time and over different situations.

Kerr et al. [1974, p. 66] discuss a number of findings with regard to the moderating effect of pressure from

external forces (interunit stress and physical danger) and from internal forces (urgency of time demands). Significant correlations between proficiency ratings and structure have been found in studies where time pressure was involved.

In this review of the research literature, Filley et al. [1976, p. 233] conclude that the effects of supportive leadership are most positive with regard to performance when (1) the subordinate has been previously denied some source of satisfaction or (2) the subordinate operates under conditions of frustration or stress. The effects of supportive leadership on subordinate satisfaction were found to be positive except in situations where work is intrinsically satisfying [Filley et al. 1976, p. 220].

With regard to instrumental leadership, Filley et al. [1976, p. 230] report that initiating structure has its most positive effects when

- (1) There is a high degree of pressure for output due to demands imposed by sources other than the leaders
- (2) The task is satisfying to subordinates
- (3) The subordinates are dependent on the leaders for information and direction
- (4) The subordinates perceive that they have labor mobility
- (5) The subordinates are psychologically predisposed toward being told what to do and how to do it
- (6) Subordinates' tasks are nonroutine
- (7) Subordinates have high occupational-level jobs
- (8) Subordinates are under stress due to threat from sources other than the leaders
- (9) The number of people working together for the same leader is high (12 or more)
- (10) The leader is considerate

Other important moderators mentioned by Fox in his literature review [1976a, p. 7] include subordinate-leader

knowledge and expertise differences, supervisor's upward influence, inter-group competition, and complementarity of leader-subordinate behavior styles.

It should be apparent from the foregoing, that research results in the leadership area are not only specific to situational characteristics, but also subject to the potential mediating effects of many other variables. The difficulty in drawing well grounded generalizations from these endeavors has by no means diminished the volume of research being done; nor, for that matter, have basic theoretical criticisms such as the relative importance of leadership to other organizational variables [Hunt and Larson, 1976, p. 235] or the merits of a cognitive versus operation approaches in leadership studies [Fox, 1976b]. Many still consider an a cognitive study of leader-subordinate dyads as an effective research opportunity.

This brief discussion of contemporary research methods in the field of leadership studies is not intended to be complete. It is introductory to the chapters which follow. The purpose of this dissertation is to borrow and adapt to an auditing environment that which has been successfully applied elsewhere. The general approach has been to use the methods of many contemporary schools rather than select one methodology. In this way, questions regarding the criteria used for selection of particular leadership measurement methods may be minimized and the study may be limited to the usefulness of the methods toward predicting satisfaction and performance in auditing situations

Chapter III

MEASUREMENTS

The foundation upon which this study is built is Identifying and Developing Leadership Aspects of Effective Management in Team-Oriented Task Groups [Fox 1976a]. In this work, Fox presents a normative model for leadership based upon current research findings -- a model specifically developed to assist managers of team-oriented (interacting) task groups in adjusting their behavior toward greater managerial effectiveness.

The adaptation of the Fox model to the field of auditing follows due to the fact that an audit team engaged in the field work phase of an annual audit represents an interacting task group. Fiedler [1967] states that in such groups, there exists a high degree of interdependence among group members. The leader coordinates the various task functions of the group's activities so that the work flows smoothly and harmoniously. The various segments of an audit program must be closely coordinated if the work of the audit team is to be successful. Certain audit procedures may be completed by an individual, yet many require a coordinated effort by two or more.

Effective performances from audit teams are imperative if professional standards are to be maintained and if the

required efficiency for the auditing firm's profitability is to be met. Certain situational aspects of annual audits are relatively comparable. The behavior of the audit in gathering evidence is partially restricted in the interest of remaining an independent observer. Certain audit procedures are demanded by generally accepted auditing standards. Minimum standards of record-keeping and reporting are forced upon the client by the necessity to provide documentary support for items reported on tax returns and financial reports. The manufacturers of business machines, business forms, and computer software have tended to standardize the ways that most large organizations produce, record, and store documents and reports. Organizational structures often reflect similarities within specific industries. The auditors, themselves, tend to be similar in education, interest, aptitudes, and even standards of dress. This may be the result of a certain amount of standardization in selection policies used by major CPA firms. These conditions would seem to indicate that the study of audit teams in the field represents a potentially rewarding area for research in leadership. This is especially appropriate at a time when auditing effectiveness is continually questioned both in court cases and by government and when signs of staff member dissatisfaction are prevalent.

Fox [1976a, p. 2] regards the dominant emphasis in definitions of leadership as influence via personal interaction and considers only face-to face aspects of planning and

controlling as falling within leadership. This leads to a definition of leadership style as the behavioral predisposition or orientation on the part of a leader as he deals with the performance of management or leadership functions that result more from the leader's personality or values than from the demands of the situation at hand [Fox, 1976a, p.9]. Leadership style factors suggested by Fox [1976a, p. 10] based on his review of published factor analysis of leader behavior descriptions [Halpin and Winer, 1957; Bowers and Seashore, 1966; Wofford, 1970; Miller, 1973; House and Desler, 1974] are (A) task relevant structuring emphasis, (B) support emphasis, and (C) consultation, participation emphasis.

The normative model hypothesizes the actual behavior, as opposed to style or predisposition, that appears to be optimal under various circumstances. The model categorizes four major behavioral areas and related them to the three leadership styles previously mentioned. A listing of each behavioral area with some specific examples of positive leader behavior follows [Fox 1976a, pp. 16-27]:

Leader Support. Leader is friendly and easy to approach, is willing to listen and attentive to problems and other matters people wish to discuss. He freely gives deserved credit to others, does things to make it pleasant to be a group member and to strengthen the self-esteem of his subordinates.

Consultative-Participative, Decision-Making. Leader encourages subordinates to exchange information and ideas. When possible, he invites group member suggestions and gives serious consideration to them before finalizing decisions which affect either the individual or the group. If in a position which requires his

his retention of veto power, he uses it as sparingly as possible. He appropriately delegates decision-making to individuals, the group, or subgroups with a level of collaboration desired by them. When possible, he gives advance notice of changes and is candid and open to questions. Whenever possible, he strives for decisions relative to the pursuit of given organizational objectives which accommodate the needs and values of his subordinates.

Work Facilitation. Leader trains subordinate, consults with him on job related problems and ways to improve performance, helps him to plan and schedule work ahead of time anticipating detailed needs and problems, provides appropriate equipment, materials, and sees that decisions are made and implemented in time.

Goal Emphasis. Leader uses appropriate process to develop realistic goals and plans, and gain commitment to them, he stresses high standards of performance for himself and his subordinates, and establishes appropriate contingencies between rewards and individual and group performance.

Table 1 lists the major constraints to leader behavior in each of the behavior areas. Two of these constraints (lack of decisiveness and management of contingencies) were singled out by Fox to be of particular importance and are found as separate predictor variables in this study (Decisiveness and Management of Rewards and Punishment).

In conjunction with research carried out among ROTC cadets while testing his normative model, Fox [1976c] developed a leader behavior questionnaire which measured both the four behavioral areas in his normative model as well as the two behavioral areas in the Ohio State Leadership Studies model (C and I.S.). Each variable score for a leader's behavior is computed by combining the individual scores of a subset of questionnaire items. A group score is obtained by averaging the ratings for any one variable for all group

Table 1
NORMATIVE MODEL*

BEHAVIOR AREAS	CONSTRAINTS
<u>Leader Support</u>	Time Required Social Distance Therapist Role Pitfall Goal Conflict
<u>Consultative-Participative Decision-Making</u>	Real Time Pressure Absence of Subordinate Desire Selective Interest Leader Can't Deliver Differential Expertise Incapacity Personality Need to Impose Decisions
<u>Work Facilitation</u>	Lack of Influence Lack of Expertise Lack of Decisiveness
<u>Goal Emphasis</u>	Low Consultative-Participative Skill Low Technical-Conceptual Abil- ities Lack of Commitment Management of Contingencies

*[Fox, 1976a, p. 35]

members.. The first 54 items on Fox's 60 item questionnaire were selected from Form XII of the Ohio State Leader Behavior Description Questionnaire, slightly modified to fit the specific research situation -- ROTC cadets on summer camp exercises.

As used in this study, the Leader Behavior Description Questionnaire for an Independent Auditor in Charge in Field Work (Appendix B) was developed from Fox's leader behavior questionnaire, although some items were not used and eleven new items were introduced. These new items are designed to cover those facets of Fox's four leader behavior area definitions which were not included among specific questions on his original instrument. This work was carried out at the suggestion of Dr. Fox and under his guidance. The resulting 52 item questionnaire yields predictor variable scores based on the question subsets as shown in Table 2. A measure of the situational variable Leader-Member Relations is also available from a question subset (Nos. 5, 6, 27, 44, 48 and 52). It will be noted that the entire set of questions contains many that are used for more than one variable's measurement. This stems from the fact that C and I.S. purport to cover all of the behavioral classes that are significant in leadership as do L.S., C-P D-M, W.F., and G.E. There are simply two different models incorporated into the questionnaire design and they both cover the same kinds of behavior.

Table 2
LEADER BEHAVIOR VARIABLES

<u>Variable</u>	<u>Symbol</u>	<u>Item Subset (see note below)</u>
Consideration	C	1, 6, 9, 10, 2, 25, 27, 44
Initiating Structure	I.S.	18, 21, 22, 30, 32, 41, 43, 45
Leader Support	L.S.	1, 4, 6, 19, 27, 33, 44, 48
Consultative-Participative Decision-Making	C-P, D-M	5, 9, 10, 25, 26, 28, 32, 40
Work Facilitation	W.F.	2, 8, 10, 17, 22, 24, 30, 38, 45, 46, 50
Decisiveness	D	3, 11, 20, 24, 34, 36, 39
Goal Emphasis	G.E.	7, 14, 16, 18, 23, 35, 42, 47, 49
Management of Rewards and Punishment	M.R.P.	13, 15, 29, 31, 37

NOTE: The score for each variable is a simple average of the individual item scores from the subset. If the score is from the Leader Behavior Description Questionnaire for an Independent Auditor in Charge of Field Work (Appendix B) it represents a measure of actual behavior for the particular variable. If the score is from the Ideal Leader Behavior questionnaire it represents a measure of optimal leader behavior as expected by the subordinate (Appendix D) or the leader (Appendix E). Group (team) scores are produced by averaging the subordinate scores for each variable in a group.

Certain minor details that are expected to rule out potential sources of error are worth mentioning. The order of items on the instrument was determined by a random distribution so as to avoid any biases that might result from having each variable's subset intact. Three experienced CPAs reviewed the appropriateness of the questions in the Leader Behavior Description Questionnaire (Appendix B) as well as subsequent research instruments in the study. Particular emphasis was placed on using language which would be neither unfamiliar nor ambiguous in the auditing environment. The possibility of reading a sexist bias into the Ohio State LBDQ question forms (every item begins with "He") was eliminated by replacing "He" with "This Auditor" and rewording the questions where possible to eliminate masculine possessive pronouns. In certain cases the range of possible answers (Always, Often, Occasionally, Seldom, Never) was expanded to include a "No Basis" selection. It was believed that this would strengthen a respondent's confidence in the instrument for those cases where his knowledge of how the auditor in charge acted was vague or nonexistent.

Certain basic assumptions underly the research enumerated in this chapter and stipulate the measurements selected. In part, this study is a test of the applicability of the Fox Normative Model and the Ohio State Leadership Studies Model in the public accounting context. Some of the working hypotheses which apply to these models and this study follow:

Hypothesis 1

There will be significant variance among individual teams on measured dimensions of team leader behavior (predictor variables) in terms of perceptions of actual behavior.

Hypothesis 2

There will be significant variance among individual team members on measured dimensions of ideal leader behavior.

These two hypotheses reflect an assumption common to most leader behavior research -- that there are individual differences with regard to perceived leader behavior and preferences of normative leader behavior. Aggregations of particular individual member's scores on leader behavior dimensions into group average scores for a leader should also result in a range of scores for the leaders whose groups are averaged, since leaders may be expected to behave differently in response to similar situations.

Hypothesis 3

There will be significant correlation between average team measurements on dimensions of leader behavior (predictor variables) in terms of perceptions of actual leader behavior and average team measurements of satisfaction and performance (criterion measures).

This hypothesis assumes that the models have predictive ability for the effects of alternate forms of leader behavior on job performance and satisfaction.

In view of the current consensus regarding the relationship between leadership effectiveness and situational variables, a decision was made to measure situational characteristics. The most comprehensive summary of the moderating effect of situational variables between criterion and leader

behavior measures was found in the Kerr et al. [1974] situational propositions. Proposition 1 of this study follows:

- (1) The greater the amount of pressure, the greater will be subordinate tolerance of leader Initiating Structure, and the greater will be the (positive) relationships between Structure and satisfaction and performance criteria. Pressure may stem from the nature of the task (degree of time urgency, uncertainty, permissible error rate) or from some threatening source external to the task.

Based upon this proposition, the following items were included in the Audit Staff Member Opinion Survey (Appendix C): measures of degree of time pressure (questions 9 and 10), permissible error rate (questions 11 and 12), and threats from exterior sources (questions 13 and 14). Uncertainty was dealt with separately. (See the discussion following Proposition 6).

Propositions 2, 3 and 4 consider the effects of intrinsic satisfaction on subordinates [Kerr et al. 1974]:

- (2) The greater the intrinsic satisfaction provided by the task, the less positive will be relationships between Consideration and satisfaction and performance criteria. Intrinsic satisfaction may be derived from high job autonomy, broad job scope, or the opportunity to do interesting and meaningful work.
- (3) The greater the intrinsic satisfaction provided by the task, the less negative will be relationships between Structure and subordinate satisfaction.
- (4) The greater the intrinsic satisfaction provided by the task, the less positive will be relationships between Structure and performance.

In accordance with the sources listed in Proposition 2, three facets of intrinsic satisfaction have been incorporated in the Audit Staff Member Opinion Survey: job autonomy

(questions 15 and 16), breadth of job scope (questions 17 and 18), and meaningful work (question 19).

Proposition 5 considers the effects of job-related information on subordinate criteria [Kerr et al. 1974]:

- (6) The greater the amount of task certainty, the greater will be the (positive) relationships between leader Consideration and subordinate satisfaction.

Proposition 9 is particularly appropriate to the CPA firm environment [Kerr et al. 1974]:

- (9) The greater the perceived organizational independence of subordinates, the greater will be the (positive) relationships between leader behavior variables and satisfaction and performance criteria. Particularly when perceived independence is low. Consideration-satisfaction and Structure-satisfaction relationships will be relatively insignificant.

Traditionally, the organizational independence of CPA firm staff members has been high. As with other professionals, a certain degree of job autonomy must be accorded CPA firm staff members to provide the necessary atmosphere of professionalism. However, the primary generator of independence has probably been the rapid growth of the profession in recent decades which has tended to create a shortage in public accounting, as well as in other areas, of qualified professionals. This has resulted in a prevailing situation where any competent staff member could expect to find employment with other CPA firms or among a wide choice of accounting positions outside of CPA firm practice. Questions 7 and 8 of the Audit Staff Member Opinion Survey (Appendix C) are

included to measure how the staff member perceives his independence with regard to alternate employment in these two areas.

No items are included in the Audit Staff Member Opinion Survey to specifically test Propositions 7, 8, or 10 [Kerr et al. 1974]:

- (7) The less the agreement between subordinate expectations of leader Consideration and Structure and their observations of these behaviors, the lower will be the levels of satisfaction and performance of subordinates. Such expectations typically result from a host of cultural, experiential, and informational sources.
- (8) The less higher management is perceived to exhibit Consideration, the lower will be the (positive) relationships between lower-level supervisors' consideration and subordinate satisfaction.
- (10) The greater the perceived upward influence of the supervisor, the greater will be the (positive) relationships between consideration and subordinate satisfaction. This will be especially true for subordinates who are highly dependent on their loss for such things as recognition, freedom, and physical and financial resources.

Proposition 7, a postulation of the relationship between the degree to which subordinate expectations of leader behavior are met and performance and satisfaction measures, may be tested using the difference between Leader Behavior Description Questionnaire and Ideal Leader Behavior (Appendix D) results as a measure of the degree to which expectations are met.

Propositions 8 and 10 [Kerr et al. 1974] deal with (1) the contrasting degrees of Consideration between higher and lower-level management as perceived by subordinates and (2)

the perceived upward influence of the supervisor. It was decided that these moderator variables are not appropriate in the CPA firm environment. All staff members are a part of "management." Even relatively inexperienced staff members find themselves in supervisory roles on some engagements. There is an opportunity for exchange between junior staff members and the managers and partners of a CPA firm that precludes the usual sorts of barriers which isolate workers from management. The flexible, informal type of organization in CPA firms also tends to reduce the importance of a supervisor's upward influence. It is also worth noting that a superior-subordinate relationship in a CPA firm is a temporary condition. As soon as an audit is completed, the staff members take positions on new audit teams. The hierarchy in a CPA firm tends to be flatter than in most organizations, with usually about four levels of professional staff and numerous members at each level. Consequently, the bulk of the power in personnel and operational matters is disbursed among a group of partners and managers making upward influence a highly complex item for measurements.

The Kerr et al. [1974] study provides the basis for the first nineteen items in the Audit Staff Member Opinion Survey (Appendix C) -- which are designed to measure moderator variables. The remaining six items (Nos. 20 to 25) include four measures of satisfaction (with colleagues, with compensation, with the leader, and with the present job situation), a measure of leader-member relations, and a

measure of the current leader's decision-making style. The necessity for the latter two will be discussed later.

The working hypothesis which is to be tested with the Kerr et al. [1974] moderator variables follows:

Hypothesis 4 (Moderated Ohio State Leadership Studies Model) The correlation between average team predictor variable measurements and criterion measures will be enhanced by classifying teams into groups based upon average team scores in certain follower characteristics as proposed by Kerr et al. [1974].

In other words, the relationship between predictor variable and satisfaction or performance will be stronger when the influences of certain follower characteristics are screened out.

The four subordinate satisfaction items included in the Audit Staff Member Opinion Survey (see questions 20, 21, 23 25, Appendix C) are derived from the Survey of Organizations. Taylor and Bowers [1972, p. 76] assumed that satisfaction was multidimensional and they used seven questions to cover satisfaction with peers, supervisor, job, organization, compensation, progress, and opportunity. For the purpose of this study, job and organizational satisfaction were combined into one question. It was concluded that satisfaction with a job in a CPA firm would be tantamount to satisfaction with the organization since every staff member moves throughout the organization, working with a variety of colleagues and supervisors. Subordinate audit staff members also perform varied tasks, depending upon a client's needs. To a certain

extent, then, the concept of a job with fixed, familiar tasks is foreign to audit staff members.

Questions regarding satisfaction with progress and opportunity were considered unnecessary in this study which is geared to large CPA firm staff members. Those who do not make satisfactory progress are soon separated from the firm--often, placed with a client. Promotions, for those staff members who remain, are practically automatic. Consequently, lack of progress should not be a problem in large CPA firms. Satisfaction related to opportunity for advancement in the organization should not be a problem, either. Generally, subordinate staff members hired are believed to have "partnership potential." The partner's position in a large CPA firm is both responsible and financially rewarding--a sufficiently advanced opportunity to satisfy most.

The Ideal Leader Behavior questionnaire (Appendix D) is identical in most respects with the Leader Behavior Description Questionnaire (Appendix B). The major difference is that instead of asking for the actual behavior of a specific leader, the Ideal Leader Behavior questionnaire asks "what the IDEAL auditor should do" in similar situations. The order of questions is identical and the same subsets are used to arrive at the eight leader behavior predictor variables. Discrepancies between the ideal version and the actual version may be used as a measure of subordinate satisfaction. This is in accordance with the Kerr et al. [1974] Proposition 7 and Porter and Lawler [1968, p. 31].

The three questionnaires discussed up to this point represent the entire set administered to audit team subordinates. What is obtained, then, is the subordinate staff member's perception of his team leader's actual behavior with regard to 52 items or situations. Subsets of these provide measures of the leader's behavior in terms of Consideration, Leader Support, and certain other predictor variables (see Table 3) as observed on a specific audit engagement. Measures in terms of the subordinate staff member's ideal for behavior from a leader in the same situations are also gathered. And, finally, measures of a number of potentially significant moderator variables are obtained (see Table 4) as well as several individual satisfaction measures.

The criterion measure for this study is a global assessment instrument (see Appendix G). It asks the manager or partner to evaluate the auditor in charge (supervisor) of the field work phase in a particular audit in terms of other persons in similar positions within the same firm. In part 1 of this questionnaire the auditor in charge is evaluated for deadline promptness, efficiency of staff utilization (two aspects), training ability, and crises avoidance. Parts 2 and 3 require the manager or partner to evaluate subordinate staff satisfaction (three aspects) and client satisfaction (four aspects). The purpose of these three preliminary parts of the "Manager's Rating of Field Work Performance" is to force the manager to think of the audit from the client's and subordinates' standpoint as well as from his own. When this

TABLE 3

TABLE OF MEASUREMENTS

<u>Variables</u>	<u>Measuring Instrument</u>
PREDICTORS: (13)	
Consideration	
Initiating Structure	
Leader Support	ACTUAL BEHAVIOR: Leader
Consultative-Participative	Behavior Description
Decision Making	Questionnaire
Work Facilitation	
Decisiveness	NORMATIVE BEHAVIOR: Ideal
Goal Emphasis	Leader Behavior
Management of Rewards and Punishment	
LPC (Self Description)	
LPC	Fox LPC Scales
Social LPC	
Task LPC	
LPC Difference Score	
MODERATORS: (7)	
Pressure	
Task Certainty	
Information Needs	
Organizational Independence	
Intrinsic Work Satisfaction	Audit Staff Member Opinion
Leader-Member Relations	Survey
Leader's Decision-Making Style	
CRITERION MEASURES: (7)	
Team Performance	Supervisor's Rating of Field
Team Leader Performance	Work Performance
Satisfaction with Colleagues	
Satisfaction with Compensation	Audit Staff Member Opinion
Satisfaction with Current Leadership	Survey
Overall Job Satisfaction	
Satisfaction with Leader	Difference (ILB - LBDQ)

TABLE 4

LPC MEASUREMENTS

<u>Variable</u>	<u>Version of LPC Instrument</u>	<u>Total Score Item Subset (See Appendix F)</u>
LPC	Least Preferred Coworker	1,3,4,7,8,9,11,12,14,20,21, 26,28,29
LPC Self Description	Me	1,3,4,9,10,14,17,18,19,20, 22,25,28,31
Task LPC	Least Preferred Coworker	4,5,13,14,17,18,25,31
Social LPC	Least Preferred Coworker	1,3,7,11,15,20,21,28
LPC Difference Score	Least Preferred Coworker	(Task LPC - Social LPC)

is done, the possibility of a standardized overall evaluation of leader effectiveness and team effectiveness may be improved over a point blank, one-item rating. Question 4a (How would you evaluate the overall effectiveness of this team based upon your review of the field work?) is the criterion measure for team performance. Question 4b (How effective was the auditor in charge of field work as a leader on this particular audit?) is a performance evaluation for the leader, alone, separated from the success or failure of the team. These will be analyzed against the results of the other questionnaires as two distinct performance criterion measures.

Each audit team leader (supervisor) completed the Ideal Leader Behavior questionnaire (Appendix E) as did his subordinates on the audit. Any differences between a supervisor's behavior expectations and the average responses of his subordinates could then be analyzed to determine whether expectations are role dependent. The cover sheet on the Ideal Leader Behavior questionnaire administered to team leaders contains an additional question which illicit leader-member relations as judged by the team leader on a five point scale ranging from very good to very poor. This question is similar to question 22 of the Audit Staff Member Opinion Survey which asks for the subordinate's judgment of leader-member relations.

Each team leader must complete the Fox LPC Self Description instrument (Appendix F) in duplicate -- one version for a least preferred coworker and the second version describing himself. The instrument is expanded over the standard

sixteen scale version used by Fiedler to include scales that fully cover the five recurring dimensions found by Tupes and Christal [1961]: urgency, agreeableness, dependability, emotional stability, and culture. A complete review of the development of this instrument is included in Fox [1976d].

For this study, two LPC instruments are employed. The supervisor's rating of his least preferred coworker will be obtained by combining the scores for fourteen scales from the 32 item instrument-- least preferred coworker version. This measure will be referred to as LPC [Fox, 1976a, p.4]. The supervisor's rating of himself is termed LPC self-description and is obtained by combining scores for a different subset of fourteen items on the appropriate version of the instrument. It should be noted that the respondent checks either of two boxes at the top of the instrument to identify the instrument as a description of "My Least Preferred Co-worker" or "Me." Additional LPC measures are possible from these instruments (Task LPC, Social LPC, and a Difference Score) by combining different subsets of scales (see Table 4).

The various LPC measures obtained may then be used as predictor variables to test the following working hypothesis:

Hypothesis 5 (Fiedler Contingency Model)
 There will be a correlation between leader LPC score and measures of leader and group effectiveness as proposed by Fiedler [1967].

One item has been included in the study in an effort to single out each team leader's decision method (item 24, Appendix C). This is based upon the Normative Model of

Leadership proposed by Vroom and Yetton [1973]. Five decision methods open to a leader are proposed in the case of individual problems -- decision problems encountered by one subordinate member of a group. The methods and their assigned symbolic notations are [Vroom and Yetton, 1973, p. 13]:

- A 1 : where the leader makes the decision for himself, using only information available to him at that time.
- A 11 : where the leader makes the decision by himself after obtaining information from the subordinate.
- C 1 : where the leader makes the decision after sharing the problem with his subordinate and hearing his suggestions and ideas.
- G 1 : where the leader and subordinate arrive at a mutually agreeable decision after analyzing the problem together.
- D 1 : where the subordinate makes the decision-- the leader having delegated that responsibility to him and provided him with any information that he held.

Vroom and Yetton categorize eighteen problem types based upon the presence or absence of eight problem attributes. Their Normative Model of Leadership included one or more of the above decision methods as the preferred solution for each of the problem types. An analysis of the eighteen problem types revealed that only four were applicable to the situations encountered by subordinate audit staff members. In each of these problem types, style G-1 was appropriate. In some cases D-1 and C-1 were also appropriate depending upon the sufficiency of subordinate information and the importance of the subordinate's acceptance of the decision.

In the particular question selected for use, it is stated that the subordinate has sufficient knowledge and information to make a quality decision. Consequently, for the case included on the questionnaire the preferred solution may be any one of the latter three. However, the objective of this study is not to test the Vroom and Yetton model, but to determine if there is a significant relationship between any one decision-making style and the criterion measures.

The research design for this study is present in Appendix A,

CHAPTER IV
ADMINISTRATION OF FIELD STUDY

The field study was performed with employees of one of the "big-eight" accounting firms. Audit teams were selected which met the following criteria:

- (a) Four or more regular members (excluding specialists)
- (b) One individual in charge of field work during that entire phase of the audit.
- (c) Ninety days or less from the time the team completed the field work.
- (d) Each team member must have been on the audit for at least ten days to be considered a regular member.

Five offices in this accounting firm (all located in the southeastern U.S.) participated in the study. Thirty-four teams were found in these offices which met the above criteria. An effort was made to include all possible teams, since in this way a representative cross-section of large audit teams would be tested. The firm could not have the option of submitting only its best audit teams (in terms of overall performance and member satisfaction) for testing.

The firm did not consider assembling all of the employees for testing at one time as a feasible way to conduct the study. Their contention was that this would be too expensive. They also preferred to designate one of their own representatives in each office to administer the questionnaires. In each case, it was a partner or personnel specialist who had been involved in the scheduling of audit field work.

Meetings were held with each of the five individuals who were to administer the questionnaires. The purpose of these meetings was to provide these individuals with all of the background information that they would need in order to administer the instruments. The models utilized in the study were explained and then each questionnaire was reviewed to show its contribution to the study. During these meetings, the teams to be tested were selected.

In order to provide anonymity to the testing process special cover sheets were designed for the sets of questionnaires provided for staff members (team leaders' supervisors). A code number for each team was assigned by the administrator and entered on the cover sheets (see Appendices A, B, and C). The audit engagement and team leader were entered following the code number. Each individual was instructed to enter the team code number on all questionnaires in his set. Staff members were further required to coin a six digit personal code number and enter it on each questionnaire. The result was that each questionnaire could be sorted by team and team member, yet no name remained on any of the documents. The name was entered on the cover sheet, which was to be removed and destroyed by the individual completing the questionnaires.

Although it would perhaps have been preferable to administer all of the questionnaires at the same time of year, this was not possible. Most of the annual work is scheduled at various times of the year -- not necessarily following

the fiscal year-end. A further complication is that many corporate clients use fiscal years which end throughout the calendar year.

Twenty-two correctly completed sets of questionnaires were eventually obtained. Of the twelve teams that were not usable, there were several reasons. In one case, the audit manager did not feel that he should evaluate the team's performance for an outsider, even with the anonymity provided. The most frequent problem was the loss of one team member due to resignation, transfer, sickness, or insufficient time in the field.

Frequent inquiries were made to the test administrators, urging them to follow up on those team members that had not been tested. A few of the discrepancies were eventually filled; however, once an audit team had been disbanded in excess of ninety days, the team was excluded from the sample.

The result of this strict enforcement of the criteria for audit team selection was to limit the statistical base for the study. This is the case, particularly, where the analysis of results for the moderator variable effects is undertaken.

One of the reasons why there were so few teams large enough to be suitable for the study is that auditing techniques in recent years have tended to become more scientific and less laborious. Greater emphasis is placed on an evaluation of internal control, statistical sample selections, and upon analytical techniques which provide assurance without

extensive verification. Also, since virtually all clients of a large CPA firm use a computerized information system, a major concern for the auditor now is to evaluate the system to determine the probability for material breakdowns in control. Audits of this genre do not require large teams to test and evaluate account balances in search of human error.

The fact that all of the offices were located in the southeastern U.S. is perhaps a positive factor in the study. To whatever extent there remain regional differences in attitudes toward authority, work habits, or job expectations, these would appear to have been screened out by using offices only in one region.

The use of firm representatives to administer the questionnaires has both positive and negative aspects; the chief advantage being that the individuals tested realized that the study was sanctioned by the firm and might be expected to adopt an attitude of sincerity in completing the questionnaires. The negative aspects of having the firm's representatives administer the questionnaires are that they lack the commitment toward the project and the intimate knowledge of the study that the originator would bring.

Chapter V

RESPONSES RELATED TO LEADER BEHAVIOR

That leaders were perceived to behave differently by their teams may be demonstrated by noting the statistics on Table 5.. Perceived leader behavior on the eight dimensions measured showed a certain amount of variability as assumed in working hypothesis number one, Chapter III. The greatest variability was measured in the two Ohio State Leadership Studies variables [Stogdill and Shartle, 1955], Consideration and Initiating Structure, with standard deviations of .35 and .29, respectively. It should be pointed out that scores in any dimension could range from a minimum of one to a maximum of five. The six Fox Normative Model variables [Fox, 1976a] showed somewhat less variability, standard deviations ranging from .27 down to .15. Means for all eight predictor variables fell within a range between 3.57 and 4.12. No particular conclusions should be drawn from these mean values, due to the lack of comparative studies using the same instrument with other groups.

There was some variability in expectation of ideal behavior from leaders as seen by individual team members, which was assumed in working hypothesis number 2 (see Table 5). As a matter of fact, the variability in the ideal behavior dimensions was generally greater than in the perceived

Table 5

LEADER BEHAVIOR VARIABILITY

A. Perceived Leader Behavior (n = 22 items)

<u>Variable</u>	<u>Mean</u>	<u>S.D.</u>	<u>Min.</u>	<u>Max.</u>	<u>S.E.</u>
Consideration	3.94	.35	3.38	4.50	.07
Initiating Structure	3.72	.29	2.92	4.30	.06
Leader Support	4.12	.26	3.75	4.67	.06
Consultative-Participative Decision-Making	3.72	.27	3.21	4.22	.06
Work Facilitation	4.00	.27	3.43	4.48	.06
Decisiveness	3.57	.15	3.19	3.76	.03
Goal Emphasis	3.62	.22	3.22	4.15	.05
Management of Rewards and Punishment	3.83	.19	3.44	4.20	.04

B. Ideal Leader Behavior (n = 69 respondents)

<u>Variable</u>	<u>Mean</u>	<u>S.D.</u>	<u>Min.</u>	<u>Max.</u>	<u>S.E.</u>
Consideration	4.32	.34	3.38	5.00	.04
Initiating Structure	4.05	.41	3.12	4.88	.05
Leader Support	4.46	.32	3.50	5.00	.04
Consultative-Participative Decision-Making	3.96	.33	3.12	4.62	.04
Work Facilitation	4.43	.33	3.27	5.00	.04
Decisiveness	3.39	.27	2.71	4.29	.03
Goal Emphasis	3.85	.35	3.00	4.78	.04
Management of Rewards and Punishment	4.01	.25	3.40	5.00	.03

behavior dimensions for the same variable. This was a surprising outcome--an indication that the perceived behavior of the 22 leaders was somewhat less variable than the consensus of how the leaders should act. Evidently, the team leaders tended to behave similarly--possibly this is a result of the firm's stated personnel policies and informal customs.

The mean scores in seven out of the eight ideal behavior variables were higher than the comparably perceived leader behavior scores in the same variable. This was the expected result. The one variable where leaders perceived behavior scored higher than the ideal was on the dimension of Decisiveness. Apparently, CPA firm audit staff members prefer less decisiveness. They expect to be involved in the decisions which affect them.

A comparison of leaders' and subordinates' expectations with regard to leader behavior may be seen in Table 6. The greatest discrepancy between the mean predictor variable scores for the two groups was .29 (Consultative-Participative Decision-Making). All but two other variables showed mean differences of less than .20. Perhaps the most notable finding is that if the mean scores are rounded to the nearest whole number, all are equal. In six of the eight variables, the subordinates' ideal scores are higher. However, this difference is always less than one standard deviation. Apparently, there is little role dependency with regard to

Table 6

IDEAL LEADER BEHAVIOR

Comparison of Leaders' and Subordinates' Expectations

<u>Variable</u>	Leader Expectations		Subordinate Expectations	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
Consideration	4.07	.21	4.32	.32
Initiating Structure	4.14	.31	4.05	.41
Leader Support	4.41	.22	4.46	.32
Consultative-Participative Decision-Making	3.67	.33	3.96	.33
Work Facilitation	4.29	.27	4.43	.33
Decisiveness	3.14	.26	3.39	.27
Goal Emphasis	3.98	.39	3.85	.35
Management of Rewards and Punishment	4.00	.23	4.01	.25

expectations of leader behavior among the 69 subordinates and 22 leaders tested.

In accordance with working hypothesis number three, Chapter III, Pearsonian correlation coefficients were computed between predictor variables and assessments of satisfaction and performance. (See Tables 7, 8, and 9.) Of the six Fox Normative Model variables, Consultative-Participative Decision-Making, Goal Emphasis, and Management of Rewards and Punishment did not show any significant correlation with the criterion scores. Leader Support correlated .41 with Leader-Member Relations and -.47 with the difference between the group averages for the 52 leader behavior items. This difference is labelled Discrepancy Measure, and is expected to be a measure, as opposed to an assessment, of group dissatisfaction.

This result raises a question of to what (negative) degree the Discrepancy Measure indicates overall job satisfaction. Porter and Lawler [1968, p. 31] define satisfaction as "the extent to which rewards actually received meet or exceed the perceived equitable level of rewards." The Discrepancy Measure used in this study is an average of all of the differences (ideal minus actual score) for each of the 52 items selected for this study from the LBDQ (see both Appendices B and D). A review of the items on these questionnaires demonstrates an element of positive or negative reward in most: for example; item (1), "treated all subordinates on the audit as professional colleagues; item

Table 7

FOX NORMATIVE MODEL

Correlation between Predictors and Criterion Scores

		Predictor Variable					
Criterion Measure		<u>L.S.</u>	<u>C-P, D-M</u>	<u>W.F.</u>	<u>D</u>	<u>G.E.</u>	<u>M.R.P.</u>
	O	-.06	.13	-.19	-.18	.01	.14
	P	-.13	.05	.06	.08	-.10	-.12
	Q	.41*	.18	.12	.21	-.16	.31
	T	-.04	.18	.20	.19	-.08	-.15
	Y	.00	-.01	.42**	.29	.05	-.16
	Z	.17	.03	.46**	.36*	.21	-.01
	Q31	-.47**	-.28	-.61**	-.56**	-.27	.04

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

<u>Symbol</u>	<u>Variable</u>
L.S.	Leader Support
C-P,D-M	Consultative-Participative Decision-Making
W.F.	Work Facilitation
D	Decisiveness
G.E.	Goal Emphasis
M.R.P	Management of Rewards and Punishment
O	Satisfaction with Colleagues
P	Satisfaction with Compensation
Q	Leader-Member Relations
T	Overall Job Satisfaction
Y	Team Performance
Z	Leader Effectiveness
Q31	Discrepancy Measure (Ideal Behavior Minus Actual Behavior)

Table 8

OHIO STATE LEADERSHIP STUDIES MODEL

Correlation between Predictors and Criterion Scores

Predictor Variable

	<u>C</u>	<u>I.S.</u>
O	-.07	-.05
P	-.12	-.10
Q	.33	.07
Criterion Measure	T	-.08
	Y	-.07
	Z	.07
	Q31	-.49**
		-.26

** denotes probability of randomness less than .05

<u>Symbol</u>	<u>Variable</u>
C	Consideration
I.S.	Initiating Structure
O	Satisfaction with Colleagues
P	Satisfaction with Compensation
Q	Leader-Member Relations
T	Overall Job Satisfaction
Z	Leader Effectiveness
Q31	Discrepancy Measure (Ideal Behavior Minus Actual Behavior)

Table 9

LPC MODEL

Correlation between LPC Measures and Criterion Scores

	<u>U</u>	<u>V</u>	<u>W</u>	<u>WV</u>	<u>X</u>
O	.11	.07	.07	.00	.25
P	-.15	.02	-.09	-.08	.07
Q	-.03	.14	-.04	-.15	-.02
T	-.06	.17	-.03	-.17	-.28
Y	-.42**	.19	-.46**	-.53**	.18
Z	-.24	.00	-.29	-.22	.36*
Q31	-.06	-.33	.13	.39	-.34

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

<u>Symbol</u>	<u>Variable</u>
U	LPC
V	Task LCP
W	Social LPC
WV	LPC Difference Score (Social LPC-Task LPC)
X	LPC Self Description
O	Satisfaction with Colleagues
P	Satisfaction with Compensation
Q	Leader-Member Relations
T	Overall Job Satisfaction
Y	Team Performance
Z	Leader Effectiveness
Q31	Discrepancy Measure (Ideal Behavior Minus Actual Behavior)

(4), "gave deserved credit to subordinates when dealing with senior colleagues," item (6), "did little things to make it pleasant to be on the audit," and item (9), "was willing to make adjustments in the audit program to suit individual subordinates."

Those items that do not represent a reward in the personal sense (for example; item (2), "anticipated problems and planned for them" and item (7), "pushed to get the field work done with a minimum of wasted time and effort") may still be regarded as related to overall job satisfaction. One must assume that a staff member serving on an audit team in the field would be less satisfied with his job, regardless of the level of social deference directed toward him, if the main goal--to gather evidence--was thwarted by poor organization and planning.

Work Facilitation correlated .42 with Team Performance and .46 with the Leader Effectiveness assessment. Decisiveness correlated .36 with Leader Effectiveness. Work Facilitation and Decisiveness correlated most strongly with the Discrepancy Measure, $-.61$ and $-.56$, respectively.

The only significant correlation between criterion measures and the two Ohio State Leadership Studies predictor variables was between Consideration and the Discrepancy Measure, $-.49$. Initiating Structure did not show any predictive ability in this sample.

The Ohio State studies are not in disagreement with these findings. Initiating Structure and Satisfaction seem to be

positively related in situations where group members perceive a need for structuring activities on the part of the leader and negatively related where the need does not exist. It would seem apparent that an audit team could fit in either category. The situation is unique in that most of the audit tests and procedures may never have been performed before in the context of the current client organization and accounting system. The audit team, itself, would be a recently assembled group where the members may have had no previous working relationships.

Although the LPC Model does not presume any predictive ability for the LPC measures, Pearsonian correlations were computed between the five LPC measures and the satisfaction and performance assessments and also with the Discrepancy Measure. Figure 5 shows the results. LPC, Social LPC, and the LPC Difference Score correlated strongly with Team Performance. It should be noted that these were negative correlations, indicating that high performance was found in teams led by low LPC leaders--persons holding their least-preferred coworker in low regard. LPC Self Description showed some correlation with the assessment of Leader Effectiveness and the LPC Difference Score correlated with the Discrepancy Measure .39.

In this study, variability was measured both in perceived leader behavior and in expected ideal behavior. There was little variation between leaders' and subordinates' notions of what ideal behavior ought to be. Three variables

from the Fox Normative Model correlated with the Discrepancy Measure--Leader Support, Work Facilitation, and Decisiveness. Work Facilitation correlated with both performance assessments--Team Performance and Leader Effectiveness. Small correlations also showed up between Leader Support and Leader-Member Relations and between Decisiveness and Leader Effectiveness. Both of these correlations appear logical.

While a discussion of the shortcomings of the study will be reserved for later, it would seem appropriate at this time to deal with the performance measures (Team Performance and Team Leader Effectiveness). Of the 22 teams, 15 were rated as being "slightly above average for our firm" and four were given the top rating, "significantly above average for our firm. Only one team was rated as having performed "average for our firm." Two were rated "slightly below average for our firm."

It is possible that the performance measure is biased. The individual making the rating does have final responsibility for the audit and by implication is deeply concerned with its adequacy. Each partner or manager may believe that the audits performed by his subordinates are better than the firm's average because he sees to it that those areas which he considers most important are performed to his satisfaction. Partners and managers may also have a tendency to believe that their office is above average for the firm--a preference based on familiarity rather than experience.

Consideration was the variable from the Ohio State Leadership Studies Model which had a significant correlation in this study. That the Discrepancy Measure, a measure of dissatisfaction, was the criterion measure that correlated (negatively) was not unexpected.

Three of the LPC variables correlated with Team Performance. As a matter of fact, no other variable was more strongly correlated with Team Performance than LPC, Social LPC, or the LPC Difference Score. These are interesting observations, but not tests of the Contingency Model because the groups are left unclassified as to Leader-Member Relations in this part of the study. Chapter VII will evaluate the study results in accordance with the Contingency Model.)

These results discussed to this point demonstrate the applicability of working hypotheses 1, 2, and 3. Neither the Fox Normative Model nor the Ohio State Leadership Studies Model variables appeared to indicate relationships with the assessments of satisfaction. The situation improves when the criterion measure of satisfaction is the Discrepancy Measure. The Ohio State Leadership Studies variables did not correlate with performance in this study, whereas, certain of the other predictor variables measured showed some relationship.

CHAPTER VI

MODERATOR VARIABLE EFFECTS

As discussed in Chapter III, eight of the ten situational propositions suggested by Kerr et al. [1974] were selected for testing in this study. The expectation was that a sharper relationship between Consideration and Initiating Structure and assessments of satisfaction and performance could be found by using the proposed moderator variables as screening devices. The usefulness of these results is limited by the performance measurement bias, discussed in Chapter V, as well as by the limited sample size.

A quadrant analysis was used to determine whether the classification by predictor variable (HI or LO ranking in Consideration or Initiating Structure) was independent of a similar classification by moderator variable (Pressure, Task Certainty, Need for Information, Organizational Independence, and Intrinsic Job Satisfaction). Table 10 shows the results of the quadrant analyses for the two Ohio State predictor variables as paired against the five moderator variables selected as feasible for this study. Although the Kerr et al. [1974] propositions were stated only in terms of the relationship of the Ohio State predictor variables to satisfaction and performance, it seemed plausible to search out any effects that the moderator variables might have on the Fox Normative

Table 10

MODERATOR VARIABLE INFLUENCES

Chi-square
Phi Coefficient
Probability of Randomness

		Moderator Variable				
		J	K	L	M	N
Predictor Variable	Consideration	.733 -.183 .39	.321 -.121 .57	.000 .000 1.000	.733 -.183 .39	.733 -.183 .39
	Initiating Structure	.000 .000 1.000	1.473 .259 .22	.733 .183 .39	.733 .183 .39	.733 -.183 .39
	Leader Support	.182 -.091 .67	.000 .000 1.000	.182 -.091 .67	1.636 .237 .20	.182 .091 .67
	Consultative- Participative D.M.	4.545 -.455 .03**	.786 .189 .38	.182 .091 .67	1.636 .273 .20	.182 .091 .67
	Work Facilitation	1.636 -.273 .20	.786 -.189 .38	.182 .091 .67	1.636 -.273 .20	.182 -.091 .67
	Decisiveness	.182 .091 .67	.786 -.189 .38	4.545 .455 .03**	.182 -.091 .67	.189 .091 .67
	Goal Emphasis	.182 -.091 .67	.000 .000 1.00	1.636 .273 .20	.182 .091 .67	1.636 -.273 .20
	Management of Rewards and Punishment	1.636 .273 .20	.000 .000 1.00	.182 -.091 .67	1.636 -.273 .20	.182 -.091 .67

Symbol	Variable	Items from App. C, Ch III
J	Need for Information	1,2,3,4,5
K	Task Certainty	6
L	Organizational Independence	7,8
M	Pressure	9,10,11,12,13,14
N	Intrinsic Satisfaction	15,16,17,18,19

** Denotes probability of randomness less than .05

Model predictor variables as well. For each combination of predictor variable (8) and moderator variable (5), the 22 teams were assigned to one of four quadrants: quadrant 1, HI classification in both predictor and moderator; quadrant 2, LO classification in both predictor and moderator; quadrant 3, LO predictor classification and HI moderator classification; and quadrant 4, HI predictor classification and LO moderator classification.

Table 10 shows the results of the test for covariation between the predictor and moderator variables based upon the number of cases falling in each category represented by the four quadrants. The chi-square statistic was computed and the strength of association was then found by measuring the phi coefficient. None of the Ohio State predictor variables showed a strong covariation for these tests--the relationship between Initiating Structure and Task Certainty appeared to be the greatest (phi coefficient of .259 and a probability of randomness of .22). There were two strong relationships between the Fox predictor variables and the moderator variables; and, in retrospect, both appear to be quite logical. Consultative-Participative Decision-Making and Need for Information had a phi coefficient of -.455. The indication here being that where the subordinate's need for information is high, he does not experience a high degree of participation in the decision making process. Decisiveness and Organizational Independence has a phi coefficient of .455. Those subordinates who felt independent of their firm, or highly

mobile in the job market, perceived their leaders as highly decisive; whereas those subordinates who did not consider themselves as mobile at the present time perceived their leaders as indecisive. It is likely that the mobile employees are the more experienced staff members--ones that would force their leaders into decisiveness by making decisions on their own as their level of expertise warranted. Consequently, these employees would tend to present relevant problems to the leader for solution in situations where the leader must act. Inexperienced subordinates might ask for decisions in situations where none is required or where information is too scant for a thoughtful decision. In these cases they could be left with a perception of their leader as indecisive.

Table 11 also shows the results of chi-square tests. However, in this instance, the predictor variable scores used are the ideal behavior measures. The moderator variables appear to exert a greater influence on expected (ideal) behavior than on actual behavior as perceived by subordinates.

A strong relationship was noted between Initiating Structure and Intrinsic Satisfaction. The phi coefficient was negative, $-.455$, which may be an indication that where there is a high degree of satisfaction inherent in the job, subordinates do not want a leader to engage in structuring activities to a high degree.

The Fox Normative Model predictor variables (ideal behavior) yielded four strong relationships with the moderator variables. Leader Support and Task Certainty, Consultative-

Table 11

MODERATOR VARIABLE INFLUENCES

Chi-square
Phi Coefficient
Probability of Randomness

		Moderator Variable				
		J	K	L	M	N
Predictor Variable (Ideal Leader Behavior)	Consideration	.000 .000 1.00	.321 .121 .57	.733 .183 .39	.000 .000 1.00	.733 -.183 .39
	Initiating Structure	.182 -.091 .67	.786 .189 .38	.182 -.091 .67	1.636 .273 .20	4.545 -.455 .03**
	Leader Support	.188 -.092 .66	6.044 .524 .01	1.692 .277 .19	.188 .092 .66	.188 .092 .66
	Consultative- Participative D.M.	2.933 .365 .08	2.121 .311 .14	.733 -.183 .39	.733 .183 .39	.733 -.183 .39
	Work Facilitation	.182 .091 .67	.000 .000 1.00	.182 .091 .67	1.636 -.273 .20	1.636 -.273 .20
	Decisiveness	.000 .000 1.00	.321 -.121 .57	6.600 .548 .01	2.933 -.365 .08	.733 .183 .39
	Goal Emphasis	.000 .000 1.00	2.121 -.311 .15	.000 .000 1.00	.733 -.183 .39	.733 -.183 .39
	Management of Rewards and Punishment	.182 -.091 .67	.000 .000 1.00	.182 -.091 .67	.182 -.091 .67	1.636 -.273 .20
Symbol		Variable		Items from App. C, Ch. III		
J	Need for Information		1,2,3,4,5			
K	Task Certainty		6			
L	Organizational Independence		7,8			
M	Pressure		9,10,11,12,13,14			
N	Intrinsic Satisfaction		15,16,17,18,19			

** Denotes probability of randomness less than .05

Participative Decision-Making and Need for Information, and Decisiveness and Pressure all appear to be strongly related where the ideal leader behavior and actual situational characteristics are concerned. The phi coefficients for these three relationships were .524, .365, and -.365, respectively. The strongest relationship of all was between Decisiveness and Organizational Independence, phi coefficient .548. The relationship between Decisiveness and Organizational Independence appears logical for the same reason when the predictor variable is ideal as for the previously discussed perceived case. The relationship between Leader Support and Task Certainty also follows a logical pattern--where there is a high degree of task certainty, leader support is desirable. The negative relationship between Decisiveness and Pressure could indicate that in high pressure situations, subordinates do not want a decisive leader. Perhaps they would prefer to operate in an atmosphere free of the constraint imposed by a highly decisive leader. The relationship between Consultative-Participative Decision-Making and Need for Information is not parallel in the ideal behavior situation to the findings for the perceived behavior situation. In the latter, it was surmised that leaders did not consult with subordinates in those cases where the subordinates reflected a high need for information. However there appears to be a positive relationship between the two variables when ideal behavior is substituted for perceived Consultative-Participative Decision-Making. This may indicate

that even though relatively uninformed, subordinates still prefer to be consulted.

The chi-square test does not take into consideration the criterion measure effects. Consequently, a further step was added to incorporate these into the quadrant analysis so that the Kerr et al. [1974] situational propositions could be examined in this environment. Table 12 contains the results. The test was basically a simple observation of the difference between quadrants. Each group was ranked HI or LO among the twenty-two groups for each predictor variable (Consideration and Initiating Structure as perceived by subordinates) and moderator variable in this phase of the study. The appropriate pairings were made to test each of the eight Kerr et al. [1974] propositions that were feasible for this study. When each group had been classified into a quadrant for a specific pairing, the average Overall Satisfaction or Team Performance was computed for the set teams in the quadrant. These average criterion measure scores were then compared to determine if they followed the direction of the proposed results.

Table 12 shows that of the sixteen tests made of the propositions studied, seven followed the expected direction of change in criterion measure. Table 13 shows the quadrants and criterion scores for propositions 1, 2, 3, 4, 5, 6 and 9. Table 14 shows the results of the tests for proposition 7.

Among the propositions where two or more tests were conducted (1, 2, 7, and 9), the agreement of observations with expected results was always mixed. Of the propositions

Table 12

TEST OF KEMP ET AL. CONJUNCTION THEORY PROPOSITIONS
Congruity of Proposed Effect and Observed Effect Directionality

<u>Kemp, et al. Proposition*</u>	<u>Moderator Variable**</u>	<u>Ohio State Predictor</u>	<u>Criterion Measure</u>	<u>Agreement of Observations</u>
1	Pressure	I.S.	Performance	YES
1	Pressure	I.S.	Satisfaction	NO
2	Intrinsic Sat.	C	Performance	YES
2	Intrinsic Sat.	C	Satisfaction	NO
3	Intrinsic Sat.	I.S.	Satisfaction	NO
4	Intrinsic Sat.	I.S.	Performance	YES
5	Information Need	I.S.	Satisfaction	YES
6	Task Certainty	C	Satisfaction	NO
7	Discrepancy	C	Performance	NO
7	Discrepancy	C	Satisfaction	NO
7	Discrepancy	I.S.	Performance	YES
7	Discrepancy	I.S.	Satisfaction	YES
8	(moderator variable not observed)			
9	Org. Independence	C	Performance	NO
9	Org. Independence	C	Satisfaction	YES
9	Org. Independence	I.S.	Performance	NO
9	Org. Independence	I.S.	Satisfaction	NO
10	(moderator variable not observed)			

* Propositions are reproduced in Chapter III

** See Figure 2 for listing of items used in measurement

TESTING PROCEDURE: Each of the 22 groups was placed into a HI or LO classification for each of the moderator variables measured, using the mean score for the variable for each group as a score for ranking in an array. The 11 highest scoring groups in the array were designated HI. The other groups were designated LO. A similar procedure was used to classify the 22 groups into HI and LO classifications for the Ohio State predictor variables. A quadrant analysis resulted for a proposition tested as follows:

		Predictor Variable	
		HI	LO
Moderator	HI	Quadrant 1 (insert average criterion score of groups fall- ing in here)	Quadrant 2 etc.
	LO	Quadrant 4 etc.	Quadrant 3 etc.

Table 13

QUADRANT ANALYSES OF KERR ET AL. CONTINGENCY THEORY PROPOSITIONS

(See Figure 2 for coding of moderator variables)

Proposition 1
I.S.

	HI	LO
HI	cases: 7 perf. 3.86	4 3.50
M	5	6
LO	3.80	4.50

Proposition 1
I.S.

	HI	LO
HI	cases: 7 sat. 3.94	4 3.75
M	5	6
LO	3.95	3.96

Proposition 3

	HI	LO
HI	cases: 5 perf. 4.06	6 4.33
N	7	4
LO	3.86	3.50

Proposition 2
C

	HI	LO
HI	cases: 5 sat. 3.63	6 3.56
N	7	4
LO	3.35	3.83

Proposition 3
I.S.

	HI	LO
HI	cases: 5 sat. 3.15	6 3.88
N	7	4
LO	3.68	3.25

Proposition 4
I.S.

	HI	LO
HI	cases: 5 perf. 3.77	6 3.55
N	7	4
LO	3.66	3.50

Proposition 5
I.S.

	HI	LO
HI	cases: 6 sat. 3.85	5 3.73
J	6	5
LO	3.41	3.52

Proposition 6
C

	HI	LO
HI	cases: 7 sat. 3.49	7 3.76
K	5	3
LO	3.73	3.44

Proposition 9
C

	HI	LO
HI	cases: 6 perf. 3.83	5 4.40
L	6	5
LO	4.00	3.60

Proposition 9
C

	HI	LO
HI	cases: 6 sat. 3.74	5 3.67
L	6	5
LO	3.45	3.67

Proposition 9
I.S.

	HI	LO
HI	cases: 7 perf. 3.92	4 4.50
L	5	6
LO	3.91	3.83

Proposition 9
I.S.

	HI	LO
HI	cases: 7 sat. 3.64	4 3.81
L	5	6
LO	3.63	3.50

Table 14

ANALYSIS OF WERR ET AL. CONTINGENCY THEORY PROPOSITION NO. 7

Comparison of Proposed Effect to Observed Effect

<u>Predictor Variable</u>	<u>Discrepancy Grouping**</u>	<u>Criterion Measure</u>	<u>Average Score</u>	<u>Result Proposed</u>	<u>Result Observed</u>
C	LO	Performance	3.91	Higher	Lower
	HI		4.00	Lower	Higher
C	LO	Satisfaction	3.58	Higher	Lower
	HI		3.67	Lower	Higher
I.S.	LO	Performance	4.18	Higher	Higher
	HI		3.73	Lower	Lower
I.S.	LO	Satisfaction	3.75	Higher	Higher
	HI		3.44	Lower	Lower

** The difference between observed (perceived) Consideration and Ideal (expected) Consideration was computed for each team. The teams were then ranked into LO and HI classifications based upon the amount of discrepancy as represented by the computed difference. Eleven teams were included in each classification. The average Overall Satisfaction and Team Performance were computed for each classification. The same procedures were also followed using Initiating Structure as a predictor variable. Proposition 7 states that the higher the discrepancy between expectations of behavior and observations of behavior for both Consideration and Initiating Structure activities, the lower will be the levels of satisfaction and performance of subordinates.

where one test was made (3, 4, 5, and 6), two showed observations in accordance with the proposed result. Four of the seven propositions relating to performance and three out of nine propositions relating to satisfaction were in agreement with the proposed results. Due to the absence of any pattern in the results of the tests of the contingency theory propositions, it is not appropriate to make further conjecture as to the applicability of these propositions in the auditing environment.

CHAPTER VII

LPC STUDY RESULTS

The 32 item Fox LPC instrument (Appendix F, Chapter III) was completed by each team leader in two versions--for least preferred coworker and for self. Five predictor variables were obtained from these instruments; LPC, Task LPC, Social LPC, and LPC Self Description. Table 4, Chapter III, lists the item subsets which comprise these variables.

Assignment of teams into octants of Fiedler's classification system acquired three measurements; position power, task structure, and leader-member relations [Fiedler, 1967, pp. 22-32]. Position power was measured using a set of 13 questions as utilized by J. G. Hunt [Fiedler, 1967, p. 281]. These questions were discussed with the partner or specialist in charge of assigning staff to audit teams in three of the offices visited. In every case, at least ten of the questions were answered in the affirmative--indicate an attribute of high position power.

Group task structure was evaluated by having the same three experts who answered the position power questions evaluate an audit team member's job in the manner suggested by Fiedler and Chemers [1974, p. 68]. Four dimensions of task characteristic (goal clarity, goal-path multiplicity, decision verifiability and decision specificity) were scored by

experts on a scale from 1 (low structure) to 8 (high structure). In each the mean score of the four dimensions was below 5.0, indicating low task structure. The task structure for a leader's job would be lower than the team member's job. Consequently, it can be safely assumed that the task structure of any team member, to include the leader, or the task structure of the team as a whole, is low for CPA firm audit teams.

High position power combined with low task structure indicates octants III and VII of Fiedler's classification system. Fiedler [1967, p. 121] stated that there are relatively few groups of this type in real life. Two studies were undertaken by Fiedler and his associates using groups created in a laboratory setting. The median correlations reported for these groups were: $-.33$ where leader-member relations was good (octant III) and $.05$ where leader-member relations was moderately poor (octant VII), [Fiedler, 1967, pp. 137-8].

Fiedler and Chemers [1974, p. 64-5] indicate two ways to measure leader-member relations. One method was to ask group members to indicate on a sociometric scale their acceptance of their leader as opposed to other supervisors. The second method was to ask the leader to answer ten bipolar (eight-point) questions, the sum of which yields a group atmosphere score. Fiedler and Chemers [1974, p. 65] admit that the first method is awkward due to the fact that most employees do not care to show low regard for their

supervisors. The second method may be criticized on the grounds that it represents an evaluation by the leader, where it would be potentially embarrassing for him to admit the truth in certain cases. For instance, some of the scales are Efficient-Inefficient, Cold-Warm, and Friendly-Unfriendly.

For this study, four measures of leader-member relations have been taken. Six items from the Leader Behavior Description Questionnaire (items 5, 6, 27, 44, 48, and 52) when combined and averaged provide a measure of leader-member relations [Fox, 1976c, Table 19C]. Each team member was asked to give a global assessment of leader-member relations. Subordinates answered the question, "All in all, how would you judge your relationship with the auditor in charge of field work for the engagement listed on the cover sheet to this set of questionnaires?" A group average of these responses provides a second measure of leader-member relations. Leaders were also asked to answer a similar question in an appropriately modified version, providing a third measure of leader-member relations. A fourth measure was obtained by taking a simple average of the second and third measures. It was assumed that equal weight should be given to the supervisor's and subordinates' respective assessments, since the phenomena being measured represents an average of a series of dyadic relationships. Therefore, in each dyad the leader and the subordinate should be given equal weight.

Table 15 contains the results where the teams are split into respective octants using the LBDQ subset as a measure

Table 15.

FIEDLER CONTINGENCY MODEL

Rank-Order Correlation Coefficients between LPC and Criterion Scores

Octant III (Leader-Member Relations: Good) n=11

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.35	.09	-.56*	-.70**	.00
Leader Effectiveness	-.40	-.29	-.52*	-.23	.29
Discrepancy Measure	-.38	.09	.08	-.18	-.72**
Colleague Sat.	.00	.09	-.17	-.22	.71**
Compensation Sat.	-.32	.18	-.21	-.45	-.35
Overall Job Sat.	.08	.25	.04	-.30	-.30

Octant VII (Leader-Member Relations: Moderately Poor) n=11

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.57*	-.02	-.50	-.29	.19
Leader Effectiveness	-.39	-.21	-.33	-.04	.27
Discrepancy Measure	.50	-.47	.55*	.74**	-.08
Colleague Sat.	.12	.03	.14	.14	.15
Compensation Sat.	.06	-.16	.19	.19	.61**
Overall Job Sat.	-.15	-.27	-.10	.12	-.24

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

Leader-Member Relations scores are a composite of items 5, 6, 27, 44, 48, and 52 from the Leader Behavior Description Questionnaire (Apt. 3, Chapter III). Octant III Teams: Nos. 3, 5, 7, 8, 9, 10, 12, 16, 17, 18, 19. Octant VII Teams: Nos. 1, 2, 4, 6, 11, 13, 14, 15, 20, 21, 22.

of leader-member relations. The rho-value (Spearman rank-order correlation) between LPC and Team Performance for Octant III closely agrees with Fiedler's predication of $-.33$, however, Octant VII results are quite different. LPC and Team Performance show a rho-value of $-.57$, as opposed to Fiedler's result of $.05$. Strong correlations appear between Team Performance and Social LPC $-.56$ and LPC Difference $-.70$. The LPC Self Description Correlates with two measures of satisfaction; $.71$ with Satisfaction with Colleagues and $-.72$ with the Discrepancy Measure, a measure of dissatisfaction. These last four correlations, all Octant III values, should be compared with their Octant VII counterparts. In this way, it can be determined to what extent the LPC variables discriminate between the two octants. It is apparent that the LPC Difference Score shows the greatest disparity in Team Performance rank order correlations. The other LPC measures seem to be in the same vicinity, regardless of octant. The same holds true for all LPC measures in their correlations with Leader Effectiveness.

The Discrepancy Measure appears to be the criterion measure which contains the most diversity in correlations when shifting from Octant III to Octant VII. The spread between the rank-order correlations is $.88$ LPC Coworker, $.56$ Task LPC, $.47$ Social LPC, $.92$ LPC Difference Score, and $.64$ LPC Self Description. The only other correlation spreads that enter into this range of magnitude are: $.41$, Team Performance and LPC Self Description; $.56$, Colleague Satisfaction

and LPC Self Description; .64, Satisfaction with Compensation and LPC Difference Score; .96, Satisfaction with Compensation and LPC Self Description; .52, Overall Job Satisfaction and Task LPC; and .42, Overall Job Satisfaction and LPC Difference Score.

Table 16 contains the rank-order correlation values where the measure of leader-member relations is a single-item assessment given by team subordinates. In this particular analysis, there were nine median valued teams which were eliminated in the process of dividing the teams into octants. Perhaps as a consequence of this, the resulting rank-order correlations are stronger than in the other analyses in which far fewer teams were eliminated. Once, again, the results do not coincide with Fiedler's predictions; LPC and Team Performance correlated $-.52$ and $-.80$ for Octants III and VII, respectively ($-.33$ and $.05$, predicated).

A large number of significant rho-values were computed in the analysis where leader-member relations was measured by using the team subordinate assessment. Eleven correlations of $.71$ or greater may be noted in Table 16. It may be of particular interest that the three strongest correlations with Team Performance (LPC Coworker $-.80$, Social LPC $-.90$, and LPC Difference Score $-.78$) are all negative values. This is an indication that leaders with low LPC scores, presumably task-oriented, are more successful than high LPC leaders [Fiedler and Chemers, 1974, p. 78]. Similar results may also be noted on the other performance measure, Leader

Table 16

FIEDLER CONTINGENCY MODEL

Rank-Order Correlation Coefficients between LFC and Criterion Scores

Octant III (Leader-Member Relations: Good) n=6

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LFC Self</u>
Team Performance	-.52	-.39	-.52	-.46	-.03
Leader Effectiveness	-.56	-.56	-.56	-.37	.15
Discrepancy Measure	-.49	.03	-.49	-.77*	-.37
Colleague Sat.	.10	.29	.10	-.10	.49
Compensation Sat.	-.81**	-.67	-.81**	-.61	-.32
Overall Job Sat.	-.41	-.58	-.41	.03	-.70

Octant VII (Leader-Member Relations: Moderately Poor) n=

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LFC Self</u>
Team Performance	-.80**	.30	-.90**	-.78**	.50
Leader Effectiveness	-.85**	.23	-.81**	-.58	.50
Discrepancy Measure	.65	-.52	.58	.77**	-.45
Colleague Sat.	.36	.24	.02	-.07	-.02
Compensation Sat.	-.16	.22	.00	-.54	.71*
Overall Job Sat.	-.61	.16	-.47	-.63	.77**

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

Leader-Member Relations scores are a group average of a single item, global assessment from the Audit Staff Member Opinion Survey (App. C, Chapter III, item 22). Octant III Teams: Nos. 6,12,16,17,19,22. Octant VII Teams: Nos. 7,8,11,13,14,18,21. Deleted Teams: 1,2,3,4,5,9,10,15,20.

Effectiveness, which also shows strong negative correlations with LPC Coworker, Social LPC, and LPC Difference Score.

There were numerous large differences between the Octant III and Octant VII rho-values. Once again, the Discrepancy Measure appears to show the greatest amount of diversity when shifting between octants. There were differences of 1.14, LCP coworker; .55, Task LPC; 1.17, Social LPC; and 1.54, LPC Difference Score. Team Performance, Leader Effectiveness, and Overall Job Satisfaction showed differences when shifting between octants of .69, .79, and .74 for correlations with Task LPC. Team Performance, Colleague Satisfaction, and Overall Job Satisfaction when correlated with LPC Self Description differed .53, .51, and 1.47 between octants. There was a spread of .66 when comparing the rho-values for Overall Job Satisfaction and the LPC Difference Score.

The above results were not unexpected. Since a large number of median values were eliminated, differences should have been more marked for a shift in a major element of situational favorableness.

Table 17 contains the rank-order correlations between the LPC predictor variables and the criterion measures where the measure of leader-member relations is the leader's global assessment. The Team Performance correlation for Octant VII comes closest to the Fiedler [1967, pp. 137-8] predication, -.09 in lieu of .05. Team Performance and LPC Coworker correlate -.64 in Octant III, compared to the predicted value of -.33

Table 17

FIEDLER CONTINGENCY MODEL

Rank-Order Correlation Coefficients between LPC and Criterion Scores

Octant III (Leader-Member Relations: Good) n=11

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.64**	-.34	-.53*	-.29	-.36
Leader Effectiveness	-.29	-.75**	-.40	.29	-.39
Discrepancy Measure	-.21	.02	.27	-.18	-.18
Colleague Sat.	.01	.31	-.19	-.34	.34
Compensation Sat.	-.28	.13	-.12	-.35	.04
Overall Job Sat.	-.64**	-.07	-.40	-.40	-.12

Octant VII (Leader-Member Relations: Moderately Poor) n=11

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.09	.53*	-.19	-.47	.29
Leader Effectiveness	-.14	.45	-.09	-.36	.37*
Discrepancy Measure	.16	-.70**	.33	.64**	-.50
Colleague Sat.	.51	-.08	.51	.35	.25
Compensation Sat.	.38	-.01	.54*	.17	.12
Overall Job Sat.	.65**	.32	.48	.13	.11

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

Leader-Member Relations scores are a single-item global assessment given by the group leader (instruction page, App. E, Chapter III).

Octant III Teams: Nos. 1,2,5,12,15,16,17,18,20,21,22. Octant VII Teams: Nos. 3,4,6,7,8,9,10,11,13,14,15.

Significant correlations appear between LPC Coworker and Overall Job Satisfaction; $-.64$, Octant III and $.65$, Octant VII. From this, it seems task-oriented leaders (low LPC) have teams with higher satisfaction when leader-member relations are perceived as good by the leader and high LPC (relations-oriented) leaders have teams with higher satisfaction when the leader perceives leader-member relations as moderately poor. Fiedler and Chemers [1974, p. 78] hypothesize that a low LPC leader in a favorable situation will be relaxed, friendly, and considerate; whereas, the high LPC leader in an unfavorable situation will seek a close relationship with his group members. The negative correlation for Octant III, a favorable situation, could result from the satisfying effect of human-relations activities coming from the low LPC (task-oriented) leader. The positive correlation in Octant VII is the result of high LPC (relations-oriented) leaders resorting to their primary style in this unfavorable situation.

Table 17 reveals many examples of extreme shift in correlation between octants for similar sets of variables. However, as in Tables 15 and 16, in most cases both correlations are not statistically significant, limiting the amount which one may conclude from the differences.

The division of teams into Octants III and VII for all of the analyses up to this juncture has been based upon perceptions or assessments by team subordinates (Tables 15 and 16) or team leaders (Table 17). The final analyses used an

average of team leader assessments and subordinate average assessments. Table 18 reveals that some of the results are similar. The negative to positive satisfaction shift for LPC Coworker as conditions become less favorable continues. Strong correlations continue between the Discrepancy Measure and the LPC Difference Score in Octant VII. Octant III correlations between LPC Self Description and Team Performance, Leader Effectiveness, and Overall Job Satisfaction surfaced where none had been statistically significant before.

When comparing Tables 15, 16, 17, and 18 one might be concerned that there are not more similarities. However, if one carefully compares the assignment of teams to octants, as noted at the bottom of each table, it is apparent that only Teams 16 and 17 are consistently classified in Octant III and only Teams 11, 13, and 14 are consistently classified in Octant VII. The difference measures of leader-member relations give quite different rankings. None of the measures matches the methods suggested by Fiedler and Chemers discussed earlier. Perhaps this accounts for the disparity of the results in the study with their median rho-values. However, it should be noted that Fiedler's median results fell within rather large ranges [Fiedler, 1967, pp. 137-8] and encompassed only two studies.

Table 18

FIEDLER CONTINGENCY MODEL

Rank-Order Correlation Coefficients between LPC and Criterion Scores

Octant III (Leader-Member Relations: Good) n=9

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.64*	-.46	-.55	-.27	-.75**
Leader Effectiveness	-.17	-.87**	-.35	.52	-.58*
Discrepancy Measure	-.18	.17	.12	-.46	-.33
Colleague Sat.	-.06	.19	-.06	-.13	.23
Compensation Sat.	-.28	.12	.17	-.19	-.20
Overall Job Sat.	-.56	-.07	-.32	-.46	-.81**

Octant VII (Leader-Member Relations: Moderately Poor) n=9

	<u>LPC Coworker</u>	<u>Task LPC</u>	<u>Social LPC</u>	<u>LPC Difference</u>	<u>LPC Self</u>
Team Performance	-.23	.60*	-.50	-.60*	.14
Leader Effectiveness	-.24	.52	-.37	-.45	.49
Discrepancy Measure	.22	-.75**	.40	.80**	-.50
Colleague Sat.	.58*	-.09	.44	.36	.11
Compensation Sat.	.34	-.02	.56	.21	-.03
Overall Job Sat.	.65**	.37	.55	.03	.47

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

Leader-Member Relations scores are a simple average of the leader's global assessment (instruction page, App. E, Chapter III) and the average global assessment by team members (item 22, App. C, Chapter III). Octant III Teams: Nos. 1,2,5,12,15,16,17,20,22. Octant VII Teams: Nos. 3,4,7,8,9,10,11,13,14. Deleted Teams: 6,18,19,21.

CHAPTER VIII

SOME ADDITIONAL OBSERVATIONS AND RESULTS

Ideal Leader Behavior Correlational Study

Computations were made to determine whether any possible relationships existed between ideal (expected) leader behavior and the assessments of satisfaction and performance and the Discrepancy Measure--a measure of job dissatisfaction. Neither the Fox Normative Model nor the Ohio State Leader-ship Studies Model suggest any correlation between ideal leader behavior and criterion measures; however, the search seemed appropriate in this study due to the availability of the necessary data.

Table 19 reveals four possible significant relationships between Fox Normative Model predictor variables and criterion scores. Expectations of Leader Support correlate positively with the Discrepancy measure. This may be an indication that the greater the short-fall in leader behavior, the greater the subordinate's need for supportive activities in the future. The negative correlation between expected Management of Rewards and Punishment and Leader-Member Relations may indicate that these activities, in the CPA firm environment, may detract from good supervisor-subordinate relations. Difficult to explain is the set of correlations with expected Consultative-Participative Decision-Making. The latter correlated positively with the Discrepancy Measure, a measure

Table 19

FOX NORMATIVE MODEL

Relationship between Predictors and Criterion Scores

		Predictor Variable (Ideal Behavior)					
		<u>L.S.</u>	<u>C-P</u> <u>D-M</u>	<u>W.F.</u>	<u>D</u>	<u>G.E.</u>	<u>M.R.P.</u>
Criterion Measure	O	-.05	.12	-.11	.25	-.02	-.16
	P	.21	.22	.22	.16	-.17	-.03
	Q	-.16	.05	-.08	.13	-.10	-.38*
	T	-.08	.45**	.00	-.29	.05	.24
	Y	-.28	-.07	-.20	.09	-.11	-.05
	Z	-.24	-.09	-.07	.10	.03	-.06
	Q31	.39*	.41*	.31	.18	.14	.25

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

<u>Symbol</u>	<u>Variable</u>
L.S.	Leader Support
C-P, D-M	Consultative-Participative Decision-Making
W.F.	Work Facilitation
D	Decisiveness
G.E.	Goal Emphasis
M.R.P.	Management of Rewards and Punishment
O	Satisfaction with Colleagues
P	Satisfaction with Compensation
Q	Leader-Member Relations (subordinate assessment)
T	Overall Job Satisfaction
Y	Team Performance
Z	Leader Effectiveness
31	Discrepancy Measure (Ideal Behavior Minus Actual Behavior)

of job dissatisfaction, and positively with Overall Job Satisfaction. Possibly this indicates that dissatisfaction as measured in this study belongs on a continuum which is distinct from the overall satisfaction continuum.

The test for correlations of ideal behavior predictor variables with the set of criterion measures using the Ohio State Leadership Studies Model (Table 20) showed a strong correlation between expected structuring behavior and dissatisfaction, as represented by the Discrepancy Measure. This could be interpreted as an indication that groups having higher expectations of emphasis on structuring activities on the part of their leaders were more dissatisfied. The negative correlation between expected Initiating Structure and Team Performance may indicate that groups that prefer higher standards for structuring activities on the part of their leaders tended to perform less effectively than others.

Vroom and Yetton Normative Model of Leadership Styles

Based upon item no. 24 in the Audit Staff Member Opinion Survey, which was completed by each team subordinate (App. C, Chapter III), it was possible to classify the decision method used by each team leader. The average response for the team subordinates was computed. A score of 4.5 or above was classified as style A1; 3.5 to 4.4, A11; 2.5 to 3.4, C1; 1.5 to 2.4; G1; and 1.4 or less, D1 (refer to p. 46, Chapter III, for descriptions of decision methods in the Vroom and Yetton model).

Of the 22 team leaders, 8 used decision method C1 and

Table 20

OHIO STATE LEADERSHIP STUDIES MODEL

Relationship between Predictors and Criterion Scores

Criterion Measure	Predictor Variable (Ideal Behavior)	
	C	I.S.
O	-.01	.16
P	.28	.07
Q	-.05	-.14
T	.15	-.12
Y	-.23	-.38*
Z	-.15	-.16
Q31	.35	.54**

* denotes probability of randomness less than .10

** denotes probability of randomness less than .05

<u>Symbol</u>	<u>Variable</u>
C	Consideration
I.S.	Initiating Structure
O	Satisfaction with Colleagues
P	Satisfaction with Compensation
Q	Leader-Member Relations
T	Overall Job Satisfaction
Y	Team Performance
Z	Leader Effectiveness
Q31	Discrepancy Measure (Ideal Behavior Minus Actual Behavior)

13 used decision method D1. Groups using decision method C1 showed a higher average for both Team Performance (4.125 to 3.750) and Overall Job Satisfaction (3.750 to 3.622). The feasible solution for the typical auditing problem presented in item no. 24 suggested by Vroom and Yetton [1973, p. 194] would be decision method C1.

The mean value reported by teams on the decision method question was 2.33. The range of possible scores was from 1.00 (completely delegative style) to 5.00 (completely authoritarian style). The median style for this range would be 3.00, which compares to the actual median of 2.33, indicating a perceived bias in the direction of delegative styles. Correlation coefficients (Pearsonian) were computed between mean team response to the decision method item and the satisfaction and performance criterion measures used in other parts of this study. The only correlation of any size was with the Discrepancy Measure, .37 (probability of randomness .09). While the correlation is small, it does indicate a possible line between delegation of decision making and dissatisfaction. This result goes against the thrust of one of the major assumptions inherent to the traditional human relations school of thought in industrial relations. However, numerous studies have indicated that participatory leadership methods may not be effective in terms of performance and satisfaction of team members [Jacobs, 1970, pp. 76-84].

Item Analyses of the LBDQ Results

Pearsonian correlation coefficients were computed between each item of the Leader Behavior Description Questionnaire for an Independent Auditor in Charge of Field Work (Appendix B) and five of the criterion measures (Satisfaction with Colleagues, Satisfaction with Compensation, Leader-Member Relations, Overall Job Satisfaction, and the Discrepancy Measure). Correlations were computed on an individual ($n = 69$) and group ($n = 22$) basis. Additionally, correlation coefficients were computed for each of the 52 LBDQ items and Team Performance and Leader Effectiveness on a group basis.

Only six items when taken on an individual basis gave correlation coefficients of greater than .50; and, all correlated with the Discrepancy Measure. Table 21 lists the items and correlation coefficients. After reviewing the content of these items, it is apparent that they should correlate negatively with dissatisfaction. Leaders who perform all of these functions well may be eliminating serious potential sources of dissatisfaction. It is interesting to note that no variable other than Work Facilitation includes more than one of these items. Most of the predictor variables used in this study are made up of at least eight items (Table 2, Chapter III). Work Facilitation includes eleven items. Consequently, it is safe to conclude that the subset of items selected in the item analysis of individual responses does not approximate any of the predictor variables used. This

Table 21

ITEM ANALYSIS OF LBDQ RESULTS: INDIVIDUAL RESPONSES (n=69)

Correlation
with
Discrepancy
Measure

Item (See Appendix B, Chapter III)

-.64	25. Gave advance notice of changes in the audit where possible
-.51	35. Inspired enthusiasm among subordinates.
-.65	36. Took full charge when emergencies arose.
-.54	45. Scheduled the work to be done.
-.53	46. Skillfully coordinated the necessary interaction of subordinates with the client's employees and with each other.
-.54	50. Gave the appropriate amount of direction to subordinates.

Item

Member of Variable Item Subset

25	Consideration, Consultative-Participative Decision-Making
35	Goal Emphasis
36	Decisiveness
45	Initiating Structure, Work Facilitation
46	Work Facilitation
50	Work Facilitation

should not be taken to imply that the items correlating highest on an individual basis should approximate one or more of the predictor variables; because the analysis by item ignores the multicollinearity inherent in a subset.

Group averages of the 52 item scores from the LBDQ were also analyzed for correlation with the criterion measures used in the study. Six correlation coefficients with values over .50 were found and are listed on Table 22. Four of the items which correlated strongly in the analysis of individual responses (items 25, 35, 36, and 50). The criterion measure which correlated in all cases was the Discrepancy Measure. It is logical that where an item showed a high correlation on an individual basis, it may also show a high correlation when the individual responses in each group are averaged.

Table 22 shows the correlation coefficients for the group average responses to the LBDQ items. Two items were correlated with Team Performance. It seems appropriate that Item 2 (Anticipated problems and planned for them) would be related to Team Performance, but the positive correlation of Item 24 (Failed to take necessary action) with Team Performance is puzzling. This item was supposed to be reverse-scored. Failure to reverse the scoring would account for a correlation coefficient sign reversal; however, a review of the computer instructions and independent tests of computations showed that all items that were to be reverse-scored had, in fact, been so treated. It must be reported, then,

Table 22

ITEM ANALYSIS OF LBDQ RESULTS: GROUP RESPONSES (n=22)

<u>Correlation</u>	<u>Criterion*</u>	<u>Item (See Appendix B, Chapter III)</u>
.52	Y	2. Anticipated problems and planned for them.
.54	Y	24. Failed to take necessary action.
-.66	Q31	25. Gave advance notice of changes in the audit where possible.
-.51	Q31	35. Inspired enthusiasm among subordinates.
-.74	Q31	36. Took full charge when emergencies arose.
-.60	Q31	50. Gave the appropriate amount of direction to subordinates.

* Y = Team Performance; Q31 = Discrepancy Measure

<u>Item</u>	<u>Member of Variable Item Subset</u>
2	Work Facilitation
24	Work Facilitation, Decisiveness
25	Consideration, Consultative-Participative Decision-Making
35	Goal Emphasis
36	Decisiveness
50	Work Facilitation

that the leaders of the teams did fail to take necessary action in some circumstances and this failure correlates with team performance in this study.

Factor Analysis of the LBDQ Results

A factor analysis was undertaken to determine which subsets of items based upon perceived leader behavior from the 52 item LBDQ covaried. These subsets would be, presumably, the constructs from which future research with audit teams and the modified LBDQ (See Appendix B,) might be based. It would also serve as a useful test of the applicability of the predictor variables used for this study to compare the derived factors, item by item, with the predictor variable subsets.

After extracting the principal axes in the initial factor method, there were 15 factors with latent roots (eigenvalues) greater than 1.0. The software package used for this study, SAS 79, has a rotation capability of nine factors. A nine factor solution was computed, automatically, by varimax rotation. Subsequently the latent roots from the initial method were inspected to determine at which point mostly error is being extracted by successive factors [Guertin and Bailey, 1970, p. 116]. This point is found where the decrements in latent roots stop decreasing. This phenomenon occurred between the third and fourth factors-- indicating a three-factor rotated solution.

Table 23 contains the factor loadings from the three-

Table 23

LBDQ FACTOR ANALYSIS

Factor Loadings:

<u>LBDQ Item</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
2		.65088	
4	.65362		
6	.64897		
7		.63670	
12	.63824		
13			.60542
14			.59572
15			-.68646
16			.57781
17		.63331	
22		.50256	
23		.68928	
25	.52687	.53203	
26	.65380		
27	.78014		
30	.60763		
32	.56079		
35	.70328		
37			.63841
38		.50155	
39			.53079
44	.70148		
46	.60433		
48			.63221
50	.55334		

factor Varimax solution which exceed .50. Item 25 was common to Factors 1 and 2. This particular item has both a relations-oriented and a task-oriented connotation, which may be the reason that it appears in two factors. The factors are made up of items which have a common reference, as can be noted by reviewing the item content of the sets of items (Table 24). The twelve items in Factor 1 have to do with correct senior-subordinate relationships. They represent a composite of leader behavior that is genial, yet respectful. Subordinates were to be well informed as to the reasons behind orders, changes in the audit, what was expected of them, and any new ideas before being put into action.

Factor 2 is comprised of seven items which all indicate a proper task orientation on the part of the leader. The leader plans for problems, minimizes time and effort in the field, handles complexities efficiently, strives to meet deadlines, and settles conflicts.

Factor 3 appears to be opposite to Factor 1. These seven items all represent incorrect senior-subordinate relationships. They represent a leader who shows little concern for the feelings of his subordinates and misuses authority.

While the purpose of this study was not to derive a new model for leader behavior or to propose variables which aid in the prediction of team results and individual satisfaction, it serves a useful purpose to compare the factors developed in the study with the predictor variables used. The eight predictor variables which represent subsets of LBDQ items

Table 24

ITEMS CONTAINED IN THE THREE-FACTOR SOLUTION

Factor 1	
LBDQ Item	Text
4	Gave deserved credit to subordinates when dealing with senior colleagues.
6	Did little things to make it pleasant to be assigned to the audit.
12	Explained the reasons behind orders, requests, and instructions on occasions when it was practical to do so.
25	Gave advance notice of changes in the audit where possible.
26	Encouraged initiative in subordinates.
27	Looked out for the personal welfare of subordinate audit staff members.
30	Let subordinates know what was expected of them.
32	Discussed new ideas with subordinates on the audit before putting them into action.
35	Inspired enthusiasm among subordinates.
44	Was friendly and approachable.
46	Skillfully coordinated the necessary interaction of subordinates with the client's employees and with each other.
50	Gave the appropriate amount of direction to subordinates.
Factor 2	
2	Anticipated problems and planned for them.
7	Pushed to get the field work done with a minimum of time and effort.
17	Handled complexities in the audit efficiently.
22	Made his preferences clear to subordinates.
23	Drove hard when a deadline approached.
25	Gave advance notice of changes in the audit where possible.
38	Effectively settled conflicts when they occurred among subordinates on the audit.
Factor 3	
13	Punished the entire audit team for the poor performance of one or a few subordinates.
14	Assigned work to subordinates that was beyond their capability.
15	Needlessly called attention to the fact that performance evaluations would be submitted on each subordinate upon the completion of the audit.
16	Adopted an audit program that was unrealistic in view of the amount of time scheduled for field work.
37	Used threats of overtime work as a punitive instrument to obtain the kind of performance desired.
39	Allowed subordinates on the audit to take unnecessary advantages.
48	Misused authority.

are listed on Table 25 along with the three factors in such a way that one can compare the respective subsets. It is apparent that none of the factors closely matches any of the predictor variables. Factor 1 has four common items with Leader Support, for instance. However, Factor 1 has eight other items; Leader Support, four. Factor 2 appears to resemble a composite of Work Facilitation and Goal Emphasis in that six of its seven items are included in the twenty items from the subsets of those two variables.

The factor analysis results neither strengthen nor weaken the presumed applicability of the Ohio State and Fox Normative Models to the study of leader behavior. Since there were few strong correlations between the predictor variables and criterion measures when these models were tested, there is no reason to suspect that a factor analysis of the LBDQ results would match predictor variables from these models.

Table 25

COMPARISON OF FACTOR ANALYSIS WITH PREDICTOR VARIABLES

LBDQ Item	Factor				I.S.	L.S.	C-P, D-M	W.F.	D	G.E.	M.R.P.
	1	2	3	C							
1				X		X					
2		X									
3								X			
4	X					X			X		
5							Y				
6	X			X		X					
7		X									
8										X	
9				X				X			
10				X			Y	Y			
11											
12	X			X					X		
13			X								X
14			X								
15			X							X	
16			X								
17		X								X	
18					X			X			
19						X				X	
20											
21					X				X		
22		X			X						
23		X						X			
24										X	
25	X	X		X			Y		X		
26	X						X				
27	X			X		X					
28							X				
29											
30	X				X			Y			X
31											
32	X				X		X				X
33						X					
34											
35	X								X		
36										Y	
37			X						X		
38		X									X
39			X					X			
40							Y		X		
41					X						
42											
43					X					X	
44	X			X		X					
45					Y			Y			
46	X							X			
47											
48		X				X				X	
49										X	
50	X							X			

CHAPTER IX

CONCLUDING COMMENTS

Summary

The primary objective of this study was to determine the applicability of certain contemporary research models and techniques used for predicting the effects of leader behavior on group performance and individual satisfaction in the context of groups engaged in the conduct of annual audits for CPA firms. Two basic approaches were utilized; behavioral and situational. The Fox Normative Model and the Ohio State Leadership Studies Model were used to analyze certain leadership patterns that are included in the behavioral approach. For the situational study of leadership in the auditing environment, the contingency models of Fiedler, Vroom and Yetton, and Kerr et al. [1974] were applied.

The research instruments used in this study were, for the most part, constructed by borrowing ideas and items from existing instruments. In addition, the Fox LPC Scales were used intact. One of the nation's "big eight" CPA firms agreed to participate in the study on a regional basis. Thirty-four audit teams were selected from the firm's participating offices. These included all that fit the criteria for selection. From the teams selected, 22 complete and usable sets of questionnaires were eventually obtained. The data from

these teams was analyzed in accordance with the research design presented in Appendix A.

Five working hypotheses were listed in Chapter III. There was variability in both perceived leader behavior and ideal leader behavior as assumed in working hypothesis 1 and 2. Working hypothesis 3, which comprised the behavioral approach tests, called for correlation coefficients between predictor variables from the Fox Normative Model and the Ohio State Leadership Studies Model and the criterion measures used in the study. Four of the eight predictor variables correlated strongly with the measure of dissatisfaction; of which, three were from the Fox Normative Model. Only one predictor variable work facilitation, showed any significant correlation with the performance measures.

The analysis of results of the test of the Kerr et al. [1974] contingency model propositions for the Ohio State Leadership Studies Model was clouded by an insufficient sample size. Conclusions with regard to the applicability of these propositions to an audit team environment must be reserved until more studies are performed.

The results of the LPC study differ with regard to which measure of leader-member relations is used. Four different measures were tried. Octant III results (leader-member relations: good) tended to agree with Fiedler's predicted correlation. It was in the Octant VII case that the magnitude and direction of the correlation was radically divergent;

however, the number of published studies with groups falling into these classifications (Octants III and VII) is meager.

Leadership style classifications as suggested by the Vroom and Yetton Normative Model were made for each group. The leaders in practice seemed to delegate more decision-making to their subordinates than the model would suggest to be optimal. Groups using the appropriate leadership style had higher performance and satisfaction averages than the other set of groups.

A small number of LBDQ item responses, when evaluated on an individual basis, correlated strongly with the measure of dissatisfaction. Similar results occurred when group average item scores were used in lieu of individual responses to LBDQ items, except that two of the correlations were with team performance. Neither of these subsets remotely resembled any of the predictor variables from the two behavioral approach models.

A factor analysis of the LBDQ results suggested three groupings of items which appear on the basis of this study to be related. None of the factors derived accurately matches any of the predictor variables.

Conclusions

None of the models studied appears to be particularly useful for predicting outcomes in terms of audit team satisfaction and performance. Several facets of the problem merit further study. Situational variables may exert a stronger

influence on audit team results than with those groups frequently tested in other studies. The position which was studied, audit team leader, may tend to be an organizationally specific position--varying from office to office in the same firm. Audit team subordinates are, as a rule, not as homogenous as group members studied in other tests of these models. Some are significantly more experienced than others, and would need less structuring activity from their leaders. Audit team leaders are not equal in the ability to provide assistance to their teams because of differences in the amount of influence they have with a particular client and with their own supervisors. Lastly, professional standards dictate the level of acceptable significance from an audit team. Any shortcomings must be systematically corrected before the auditors' report can be issued. Consequently, team performance cannot vary over a wide range in the end.

Testing for the effects of moderator variables was weakened by the number of teams which could be used in the quadrant analyses. In general, the analyses could not be made if teams close to the mean in either of the variables were eliminated. This is not to say that undertaking this study was too idealistic in the final analysis--large audit teams are still in use and their leader behavior is of great importance to the respective parties involved. Nevertheless, gaining appropriate access to these teams is difficult for researchers and expensive to the CPA firm involved.

BIBLIOGRAPHY

- American Institute of Certified Public Accountants [1973],
Committee on Auditing Procedure. Statement Auditing Standards No. 1 [AICPA 1973].
- Bass, B. M. and E. R. Valenzie [1974], "Contingent Aspects of Effective Management Styles: in Contingency Approaches to Leadership, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1974], pp. 130-55.
- Bowers, D. G. and S. E. Seashore [1966], "Predicting Organizational Effectiveness with a Four-Factor Theory of Leadership," Administrative Science Quarterly [Sept. 1966] pp. 238-63.
- Fiedler, F. E. [1967], A Theory of Leadership Effectiveness [McGraw-Hill Book Company, 1967].
- Fiedler, F. E. and M. M. Chemers [1974], Leadership and Effective Management [Scot Foresman and Company, 1974].
- Filley, A. C., R. J. House, and S. Kerr [1976], Managerial Process and Organizational Behavior [Scott Foresman and Company, 1976].
- Fox, W. M. [1976a], Identifying and Developing Leadership Aspects of Effective Management in Team-Oriented Task Groups, Technical Report 70-4, March 1974, for the Office of Naval Research, JSAS Catalog of Selected Documents in Psychology, Vol. 6 [August 1976].
- Fox, W. M. [1976b], "On Operant Approaches to Leadership" in Leadership: The Cutting Edge, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1976] pp. 234-5.
- Fox W. M. [1976c], Analysis of Military Leadership in a Realistic Field Setting, Technical Report 70-6, September 1975, for the Office of Naval Research, JSAS Catalog of Selected Documents in Psychology, Vol. 6 [August 1976].
- Fox, W. M. [1976d], Least Preferred Coworker Scales: Research and Development, Technical Report 70-5, September 1974, for the Office of Naval Research, JSAS, Catalog of Selected Documents in Psychology, Vol. 6 [May 1976].

- Franklin, J. L. [1975], "Down the Organization: Influence Across Levels of Hierarchy," Administrative Science Quarterly [March 1975], 153-64.
- Greene, C. J. [1976], "Disenchantment with Leadership Research: Some Causes, Recommendations, and Alternative Directions," in Leadership: The Cutting Edge, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1976] pp. 57-67.
- Guertin, W. H. and John P. Bailey [1970], Introduction to Modern Factor Analysis [Guertin and Bailey, 1970].
- Halpin, A. W. [1957], "Leader Behavior and Effectiveness of Aircraft Commanders," in Leader Behavior: Its Description and Measurement, R. M. Stogdill and A. E. Coons, eds. [Bureau of Business Research, Ohio State University, 1967].
- Halpin, A. W. and B. J. Winer [1957], "A Factorial Study of the Leader Behavior Descriptions" in Leader Behavior: Its Description and Measurement, R. M. Stogdill and A. E. Coons, eds. [Bureau of Business Research, Ohio State University, 1957].
- Heller, F. A. [1973], "Leadership, Decision Making, and Contingency Theory" Industrial Relations [May 1973], pp. 183-99.
- Hemphill, J. K. and A. E. Coons [1957], "Development of the Leader Behavior Description Questionnaire" in Leader Behavior: Its Description and Measurement, R. M. Stogdill and A. E. Coons, eds. [Bureau of Business Research, Ohio State University, 1957].
- House, R. J. [1971], "A Path-Goal Theory of Leader Effectiveness" Administrative Science Quarterly [Jan. 1971] pp. 19-30.
- House, R. J. and G. Dessler [1974], "The Path Goal Theory of Leadership: Some Post Hoc and A Priori Tests" in Contingency Approaches to Leadership, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1974], pp. 29-55.
- Hunt, J. G. and L. L. Larson [1976], "General Discussion" in Leadership: The Cutting Edge, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1976] pp. 234-5
- Jacobs, T. O. [1970], Leadership and Exchange in Formal Organizations [Human Resources Research Organization, 1970].

- Korman, A. K. [1974], Contingency Approaches to Leadership: An Overview, in Contingency Approaches to Leadership, J. G. Hunt and L. L. Larson, eds. [Southern Illinois University Press, 1974], pp. 189-95.
- Kerr, S., C. A. Schriesheim, C. J. Murphy, and R. M. Stogdill [1974], "Toward a Contingency Theory of Leadership Based upon Consideration and Initiating Structure Literature," Organizational Behavior and Human Performance [August 1974], pp. 62-82.
- Likert, R. [1967], The Human Organization: Its Management and Value [McGraw-Hill Book Company, 1967].
- Miller, U. A. [1973], "A Hierarchical Structure of Leadership Behavior," Technical Report 66, [Management Research Center, University of Rochester], 1973.
- Peat, Marwick, Mitchell and Co. [1976], Research Opportunities in Auditing [PM & M, 1976].
- Porter, L. W. and E. E. Lawler [1968], Managerial Attitudes and Performance [Richard D. Irwin, Inc., 1968].
- Stogdill, R. M. [1974], Handbook of Leadership [The MacMillan Company, 1974].
- Stogdill, R. M. and C. L. Shartle [1955], Methods in the Study of Leadership [Bureau of Business Research, Ohio State University, 1955].
- Taylor, J. C. and D. G. Bowers [1972], Survey of Organizations [Institute for Social Research, University of Michigan, 1972].
- Tupes, E. C. and R. E. Christal [1961], Recurrent Personality Factors Based on Trait Ratings, Technical Report ASD-TR-61-97, May 1961. Personnel Laboratory, Aeronautical Systems Division, Air Force Systems Command, Lackland Air Force Base, San Antonio, Texas.
- Vroom, V. H. and P. W. Yetton [1973], Leadership and Decision Making [University of Pittsburgh Press, 1973].

APPENDIX A

Research Design

Test No. 1. Covariation: Predictor Effects

A. Measurements and Measuring Instruments

1. Predictor Variables from Appendix

Ohio State	Consideration	B
Leader Behavior		
Dimensions	Initiating Structure	B
	Leader Support	B
Fox Normative	Consultative-Participa-	
Model Leader	tive Decision-Making	B
Behavior	Work Facilitation	B
Dimensions	Decisiveness	B
	Goal Emphasis	B
	Management of Rewards	
	and Punishments	B

2. Criterion Measures from Appendix

Team Performance	G
Team Leader Effectiveness	G
Satisfaction with Colleagues	C
Satisfaction with Compensation	C
Satisfaction with Current Leadership	C
Overall Job Satisfaction	C
Satisfaction with Leader	B and D

B. Research Hypotheses

(let r stand for Pearson's product-moment correlation)

$$H_0 : r = 0 \quad H_a : r \neq 0$$

$$H_0 : F = t^2 \quad H_a : F \neq t^2$$

Test No. 2 Covariation: Predictor and Moderator Effects

A. Measurements and Measuring Instruments

1. Predictor Variables (as for Test No. 1)		
2. Criterion Measures (as for Test No. 1)		
3. Moderator Variables		<u>from Appendix</u>
Kerr, et al (1974)	Pressure	C
	Task Certainty	C
	Need for Information	C
	Organizational Independence	C
Fox (1976b)	Intrinsic Job Sat- isfaction	C
	Leader-Member Relations	C
Vroom and Yetton (1973)	Leader's Decision Method	C

B. Research Hypotheses

Quadrant Analysis: Mean Team Scores in
Each Predictor (8) and Moderator (5) for Cutting Scores
Resulting in 40 2x2 Tables.

(use a chi-square test of independence)
H₀: the two classifications are independent

H_a: the two classifications are dependent
(use a phi coefficient to determine the strength of
association where dependency is implied)

Test No. 3 Rank-Order Covariation

A. Measurements and Measuring Instruments

1. Predictor Variables

LPC

Task LPC

Social LPC

LPC Difference Score

LPC Self Description

2. Criterion Measures

(as for Test No. 1)

B. Research Hypotheses

(let r_s stand for Spearman's rank-order correlation)

$$H_o : r_s = 0$$

$$H_a r_s \neq 0$$

$$H_o : F = t^2$$

$$H_a : F \neq t^2$$

APPENDIX B

Leader Behavior Description Questionnaire for an Independent Auditor in Charge of Field Work *

Staff Member Code Number (See Directions) _____

Audit Team Code Number (See Directions) _____

Time (in weeks) you were Assigned to this Audit _____

Purpose of the Questionnaire

On the following pages is a list of items that may be used to describe the behavior of the auditor who was in charge of the field work on a recently completed field assignment. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, the behavior of the auditor you served under.

Confidentiality

The responses that you provide for this research project are confidential. Only the researcher and one member of the Graduate Faculty of the University of Florida will have access to the completed questionnaires. Your name will not be attached to any of the materials which you complete. The audit team coding will be destroyed as soon as all test materials have been collected. Consequently retracing of any questionnaire to a firm, office, or individual will be impossible.

Directions

- a. READ each item.
- b. THINK about the frequency with which your audit team leader engaged in the behavior described by the item.
- c. DECIDE whether he (A) always, (B) often, (C) occasionally, (D) seldom, or (E) never acted as described by the item. An (X) answer is provided for certain questions you may have no basis for answering.
- d. CIRCLE one of the six letters (A B C D E X) following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never
X = No Basis

* Based upon selected items from Leader Behavior Description Questionnaire Form XII, originated by staff members of the Ohio State Leadership Studies and revised by the Bureau of Business Research. This version developed by M. P. Dillaway under the guidance of W. M. Fox, University of Florida

HOW THE AUDITOR IN CHARGE OF FIELD WORK ACTED

A = Always B = Often C = Occasionally D = Seldom E = Never X = No Basis

THIS AUDITOR . . .

1. Treated all subordinates on the audit as professional colleagues. A B C D E
2. Anticipated problems and planned for them. A B C D E
3. Was hesitant about giving assignments, instructions, or orders to subordinates. A B C D E
4. Gave deserved credit to subordinates when dealing with senior colleagues. A B C D E X
5. Trusted subordinates on the audit to exercise professional judgment. A B C D E
6. Did little things to make it pleasant to be assigned to the audit. A B C D E
7. Pushed to get the field work done with a minimum of wasted time and effort. A B C D E
8. Could reduce a madhouse to system and order. A B C D E X
9. Was willing to make adjustment in the audit program to suit individual subordinates. A B C D E
10. Put suggestions made by subordinate audit staff members into operation. A B C D E X
11. Backed down when he should have been firm in dealing with subordinates on the audit. A B C D E
12. Explained the reasons behind orders, requests, and instruction on occasions when it was practical to do so. A B C D E
13. Punished the entire audit team for the poor performance of one or a few subordinates. A B C D E
14. Assigned work to subordinates that was beyond their capability. A B C D E
15. Needlessly called attention to the fact that performance evaluations would be submitted on each subordinate upon the completion of the audit. A B C D E
16. Adopted an audit program that was unrealistic in view of the amount of time scheduled for field work. A B C D E
17. Handled complexities in the audit efficiently. A B C D E
18. Emphasized to subordinates the importance of generally accepted auditing standards. A B C D E
19. Was reluctant to allow subordinates any freedom of action. A B C D E

HOW THE AUDITOR IN CHARGE OF FIELD WORK ACTED

A = Always E = Often C = Occasionally D = Seldom E = Never X = No Basis

THIS AUDITOR. . .

20. Let some subordinates have authority which he should have retained A E C D E
21. Assigned particular tasks to subordinates as opposed to general areas of responsibility A E C D E
22. Made his preferences clear to subordinates A E C D E
23. Drove hard when a deadline approached. A E C D E
24. Failed to take necessary action. A E C D E
25. Gave advance notice of changes in the audit where possible . A E C D E X
26. Encouraged initiative in subordinates. A E C D E
27. Looked out for the personal welfare of subordinate audit staff members. A E C D E X
28. Unilaterally decided how things should be done when it would have been easy to consult with subordinates. A E C D E
29. Promised rewards to subordinates that were not delivered . . A E C D E X
30. Let subordinates know what was expected of them. A E C D E
31. Assigned the least pleasant audit tasks to those subordinates who failed to perform up to expectations. . . . A E C D E X
32. Discussed new ideas with subordinates on the audit before putting them into action A E C D E X
33. Obtained the assistance of the auditor charged with final authority for the engagement whenever necessary in eliminating obstacles facing subordinates A E C D E X
34. Was easily dissuaded by the client when audit objectives were at stake A E C D E X
35. Inspired enthusiasm among subordinates A E C D E
36. Took full charge when emergencies arose. A E C D E X
37. Used threats of overtime work as a punitive instrument to obtain the kind of performance desired A E C D E
38. Effectively settled conflicts when they occurred among subordinates on the audit A E C D E X
39. Allowed subordinates on the audit to take unnecessary advantages. A E C D E

HOW THE AUDITOR IN CHARGE OF FIELD WORK ACTED

A = Always B = Often C = Occasionally D = Seldom E = Never X = No Basis

THIS AUDITOR. . .

40. Delegated areas of responsibility in the audit to specific subordinates and allowed them to make all their own decisions A B C D E
41. Made sure that subordinates on the audit knew who was in charge of the field work A B C D E
42. Needled subordinates for greater effort A B C D E
43. Encouraged uniformity in the execution of audit procedures. A B C D E
44. Was friendly and approachable A B C D E
45. Scheduled the work to be done A B C D E
46. Skillfully coordinated the necessary interaction of subordinates with the client's employees and with each other A B C D E
47. Required high productivity from all subordinates regardless of experience. A B C D E
48. Misused authority A B C D E
49. Made pep talks to stimulate subordinates. A B C D E
50. Gave the appropriate amount of direction to subordinates. A B C D E
51. Criticized the work of individual subordinates in front of others A B C D E
52. Could wait just so long, then blew up A B C D E

APPENDIX C

Audit Staff Member Opinion Survey

Staff Member Code Number _____ Audit Team Code Number _____

Directions: For each of the following, place a checkmark over one answer--the best available choice.

The responses that you provide for this research project are confidential. Only the researcher and one member of the Graduate Faculty of the University of Florida will have access to the completed questionnaires. Your name will not be attached to any of the materials which you complete. The audit team coding will be destroyed as soon as all test materials have been collected. Consequently, retracing of any questionnaire to a firm, office, or individual will be impossible.

1. How many parts of the CPA exam have you passed as of the most recent publication of results?

0 parts	1 part	2 parts	3 parts	4 parts
---------	--------	---------	---------	---------
2. For what length of time have you been employed on a full-time basis in public accounting practice?

under 6 mos.	over 6 mos. under 12 mos.	over 12 mos. under 18 mos.	over 18 mos. under 24 mos.	over 24 mos.
--------------	------------------------------	-------------------------------	-------------------------------	--------------
3. Which of the following best describes the way your combined education and experience have prepared you to perform your tasks during the past six months?

generally insufficient	slightly insufficient	no more than adequate	slightly more than adequate	far more than adequate
---------------------------	--------------------------	--------------------------	--------------------------------	---------------------------
4. In order to become a well-rounded sole practitioner, would you require more expertise in auditing techniques, taxation, management advisory services, or some other area of professional development?

all four of these	three of these	two of these	one of these	none of these
----------------------	-------------------	--------------	--------------	---------------
5. Your present staff designation is equivalent to which of these?

junior	semi-senior	senior	manager	partner
--------	-------------	--------	---------	---------
6. How many potentially correct ways are there to perform most of the tasks that you have been recently assigned?

only one correct way	usually about two ways	a few accepted alternatives	numerous ways	an unlimited number of possible ways
-------------------------	------------------------------	-----------------------------------	------------------	--
7. Which of the following best represents your understanding of the demand by other CPA firms for job applicants with your present level of education and experience?

very high	fairly high	moderate	slight	nonexistent
-----------	-------------	----------	--------	-------------
8. Which of the following best represents your understanding of the demand by private industry and government for job applicants with your present level of education and experience?

very high	fairly high	moderate	slight	nonexistent
-----------	-------------	----------	--------	-------------
9. Under how much pressure do you find yourself in getting your work accomplished on time?

almost unbearable	heavy, but bearable	moderate	slight	none
----------------------	------------------------	----------	--------	------

10. How much "slack time" do you believe is included in the budgeted hours for audits by your firm?
- none about 5% about 10% about 20% unlimited
11. In your audit experiences with your present firm, how would a material error in judgment, traceable to you, likely be evaluated?
- a cause for dismissal a delay in next promotion a cause for concern just another mistake a source of gentle ribbing
12. In your audit experience with your present firm, how would a material error in execution of an audit step, traceable to you, likely be evaluated?
- a cause for dismissal a delay in next promotion a cause for concern just another mistake a source of gentle ribbing
13. How do you expect that most of the clients you have been assigned to feel about engaging your firm?
- strongly prefer us over others delighted to engage us regard us as typical appear cool to us react in a hostile fashion
14. What are the chances that some of the clients where you have been assigned will be lost to other firms?
- very remote chance slight chance moderate chance good chance very strong chance
15. During the past six months, how specific have most of your supervisors been in giving you direction for your assigned tasks?
- far too specific quite specific fairly specific only general directions practically no directions
16. During the past six months, how receptive have most of your supervisors been to your job-related suggestions?
- completely ignore my suggestions show little confidence in my suggestions willing to take some advice pleased with most of my suggestions expect a lot of feedback from me
17. How much auditing knowledge do most of your recent assignments require?
- very little below average average above average very detailed
18. During your tenure with this firm, how would you describe the diversity of clientele to which you have been assigned?
- from one basic industry most from related industries somewhat diversified well diversified extremely diversified
19. How important to the success of the audit have your assigned tasks been during the past six months?
- unnecessary vaguely important moderately important very important of crucial importance
20. How do you feel about the majority of colleagues with whom you have worked since joining this firm?
- very dissatisfied somewhat dissatisfied neutral fairly satisfied very satisfied

21. Considering the amount of effort and diligence that you put into your work, how do you feel about your financial compensation?

very _____ somewhat _____ neutral _____ fairly _____ very _____
dissatisfied dissatisfied satisfied satisfied

22. All in all, how would you judge your relationship with the auditor in charge of field work for the engagement listed on the cover sheet to this set of questionnaires?

very good _____ satisfactory _____ adequate _____ unsatisfactory _____ very poor _____

23. All in all, how satisfied were you with the leadership ability of the auditor in charge of the field work on the audit listed on the cover sheet to this set of questionnaires?

very _____ somewhat _____ neutral _____ fairly _____ very _____
dissatisfied dissatisfied satisfied satisfied

24. Assume that you are once again working in the field on the audit listed on the cover sheet with the same auditor in charge. You are engaged in tests of transactions in an area of material importance. You are confident that your education and experience are sufficient to enable you to handle this assignment. It becomes apparent to you that the number of errors uncovered are significantly higher than expected, based on results of similar tests recorded in the prior year's workpapers and guidelines included in the audit program. Additional audit tests will be necessary. Accordingly, you call this fact to the attention of the auditor in charge. Based upon your experience with this person during this recently completed audit, how would the decision be reached as to the nature and extent of the additional audit steps? (check one)

- _____ (a) The auditor in charge would take over and make the decision by himself, without any further help from you.
- _____ (b) The auditor in charge would make the decision by himself after using you to obtain any additional facts that he may consider necessary for his decision, but without getting your ideas or suggestions.
- _____ (c) The auditor in charge would discuss the problem thoroughly with you, getting all your ideas and suggestions; then, make the decision by himself.
- _____ (d) The auditor in charge would analyze the problem with you and, together, you would arrive at a mutually agreeable solution.
- _____ (e) The auditor in charge would delegate the decision to you, giving you any pertinent information that he possesses.
25. In an overall sense, how satisfied are you with your present job situation?

very _____ somewhat _____ neutral _____ fairly _____ very _____
dissatisfied dissatisfied satisfied satisfied

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

APPENDIX D

Ideal Leader Behavior*

(Form S)

(What You Expect of an Independent Auditor in Charge of Field Work)

Staff Member Code Number (See Directions) _____

Audit Team Code Number (See Directions) _____

Purpose of the Questionnaire

On the following pages is a list of items that may be used to describe the behavior of an auditor in charge of field work, as you think he should act. Each item describes a specific kind of behavior, and you must judge whether the behavior is desirable or undesirable. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. It simply asks you to describe what an ideal auditor ought to do in supervising the field work of an audit.

Confidentiality

The responses that you provide for this research project are confidential. Only the researcher and one member of the Graduate Faculty of the University of Florida will have access to the completed questionnaires. Your name will not be attached to any of the materials which you complete. The audit team coding will be destroyed as soon as all test materials have been collected. Consequently, retracing of any questionnaire to a firm, office, or individual will be impossible.

Directions

- a. READ each item.
- b. THINK about how frequently the auditor should engage in the behavior described by the item.
- c. DECIDE whether he should always, often, occasionally, seldom, or never act as described by the item.
- d. CIRCLE one of the five letters following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

*Based upon selected items from Leader Behavior Description Questionnaire Form XII, originated by staff members of the Ohio State Leadership Studies and revised by the Bureau of Business Research. This version developed by M. P. Dillaway under the guidance of W. M. Fox, University of Florida.

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL Auditor SHOULD do:

1. Treat all subordinates on the audit as his professional colleagues. A B C D E
2. Anticipate problems and plan for them A B C D E
3. Give assignments, instructions, or orders to subordinates on the audit as necessary A B C D E
4. Give deserved credit to his subordinates on the audit when dealing with senior colleagues A B C D E
5. Trust subordinates on the audit to exercise professional judgment. A B C D E
6. Do little things to make it pleasant to be assigned to the audit. A B C D E
7. Push to get the field work done with a minimum of wasted time and effort. A B C D E
8. Be able to reduce a madhouse to system and order. A B C D E
9. Be willing to make adjustments in the audit program to suit individual subordinates. A B C D E
10. Put suggestions made by subordinate audit staffmembers into operation. A B C D E
11. Back down when he ought to stand firm in dealing with subordinates on the audit A B C D E
12. On occasions when it is practical to do so, explain the reasons for his orders, requests, or instructions A B C D E
13. Punish the entire audit team for the poor performance of one or a few subordinates. A B C D E
14. Assign work to subordinates on the audit that is beyond their capability. A B C D E
15. Needlessly call attention to the fact that he will be submitting performance evaluations on subordinates following the completion of the audit A B C D E
16. Adopt an audit program that is unrealistic in view of the amount of time scheduled for field work A B C D E
17. Handle complexities in the audit efficiently. A B C D E
18. Emphasize to subordinates on the audit the importance of generally accepted auditing standards. A B C D E
19. Be reluctant to allow subordinates on the audit any freedom of action A B C D E
20. Let some subordinates on the audit have authority which he should keep. A B C D E

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL auditor SHOULD do:

21. Assign particular tasks to subordinates on the audit as opposed to general areas of responsibility A B C D E
22. Make his preferences clear to subordinates on the audit A B C D E
23. Drive hard when a deadline approaches A B C D E
24. Fail to take necessary action A B C D E
25. Where possible, give advance notice of changes in the audit A B C D E
26. Encourage initiative in subordinates on the audit A B C D E
27. Look out for the personal welfare of subordinate audit staffmembers. A B C D E
28. Unilaterally decide how things should be done when he could easily consult with subordinates on the audit A B C D E
29. Promise rewards to subordinates on the audit that he can't deliver A B C D E
30. Let subordinates on the audit know what is expected of them A B C D E
31. Assign the least pleasant audit tasks to the subordinates who fail to perform up to his expectations. A B C D E
32. Discuss new ideas with subordinates on the audit before putting them into action A B C D E
33. Obtain the assistance of the auditor charged with final authority for the engagement whenever necessary in eliminating obstacles facing subordinates on the audit. A B C D E
34. Be easily dissuaded by the client when audit objectives are at stake A B C D E
35. Inspire enthusiasm among subordinates on the audit. A B C D E
36. Take full charge when emergencies arise A B C D E
37. Use threats of overtime work as a punitive instrument to obtain the kind of performance he wants. A B C D E
38. Settle conflicts when they occur among subordinates on the audit A B C D E
39. Allow subordinates on the audit to take advantage of him. A B C D E
40. Delegate areas of responsibility in the audit to specific subordinates and allow them to make all their own decisions A B C D E

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL Auditor SHOULD do:

41. Make sure that subordinates on the audit know that he is in charge of the field work. A B C D E
42. Needle subordinates for greater effort A B C D E
43. Encourage uniformity in the execution of audit procedures A B C D E
44. Be friendly and approachable A B C D E
45. Schedule the work to be done A E C D E
46. Skillfully coordinate the necessary interaction of subordinates on the audit with the client's employees and with each other. A B C D E
47. Require high productivity from all subordinates on the audit regardless of experience. A B C D E
48. Misuse his authority A B C D E
49. Make pep talks to stimulate subordinates on the audit A B C D E
50. Give the appropriate amount of direction to subordinates on the audit. A B C D E
51. Criticize the work of subordinates on the audit in front of others A B C D E
52. Be able to wait just so long, then blow up A B C D E

APPENDIX E

Ideal Leader Behavior*

(Form L)

(What You Expect of an Independent Auditor in Charge of Field Work)

Audit Team Code Number (See Directions) _____

Purpose of the Questionnaire

On the following pages is a list of items that may be used to describe the behavior of an auditor in charge of field work, as you think he should act. Each item describes a specific kind of behavior, and you must judge whether the behavior is desirable or undesirable. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. It simply asks you to describe what an ideal auditor ought to do in supervising the field work of an audit.

Confidentiality

The responses that you provide for this research project are confidential. Only the researcher and one member of the Graduate Faculty of the University of Florida will have access to the completed questionnaires. Your name will not be attached to any of the materials which you complete. The audit team coding will be destroyed as soon as all test materials have been collected. Consequently, retracing of any questionnaire to a firm, office or individual will be impossible.

Audit Team Leader Opinion Survey

All in all, how would you judge your relationship with the staff members who were assigned to you for the field work phase of the engagement listed on the cover sheet? (Check One)

very good	satisfactory	adequate	unsatisfactory	very poor
-----------	--------------	----------	----------------	-----------

Directions

- READ each item.
 - THINK about how frequently the auditor should engage in the behavior described by the item.
 - DECIDE whether he should always, often, occasionally, seldom, or never act as described by the item.
 - CIRCLE one of the five letters following the item to show the answer you have selected.
- A = Always B = Often C = Occasionally D = Seldom E = Never

*Based upon selected items from Leader Behavior Description Questionnaire Form XII, originated by staff members of the Ohio State Leadership Studies and revised by the Bureau of Business Research. This version developed by M.P. Dillaway under the guidance of W. M. Fox, University of Florida.

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL Auditor SHOULD do:

1. Treat all subordinates on the audit as his professional colleagues. A B C D E
2. Anticipate problems and plan for them A B C D E
3. Give assignments, instructions, or orders to subordinates on the audit as necessary A B C D E
4. Give deserved credit to his subordinates on the audit when dealing with senior colleagues A B C D E
5. Trust subordinates on the audit to exercise professional judgment. A B C D E
6. Do little things to make it pleasant to be assigned to the audit. A B C D E
7. Push to get the field work done with a minimum of wasted time and effort. A B C D E
8. Be able to reduce a madhouse to system and order. A B C D E
9. Be willing to make adjustments in the audit program to suit individual subordinates. A B C D E
10. Put suggestions made by subordinate audit staffmembers into operation. A B C D E
11. Back down when he ought to stand firm in dealing with subordinates on the audit A B C D E
12. On occasions when it is practical to do so, explain the reasons for his orders, requests, or instructions A B C D E
13. Punish the entire audit team for the poor performance of one or a few subordinates. A B C D E
14. Assign work to subordinates on the audit that is beyond their capability. A B C D E
15. Needlessly call attention to the fact that he will be submitting performance evaluations on subordinates following the completion of the audit A B C D E
16. Adopt an audit program that is unrealistic in view of the amount of time scheduled for field work A B C D E
17. Handle complexities in the audit efficiently. A B C D E
18. Emphasize to subordinates on the audit the importance of generally accepted auditing standards. A B C D E
19. Be reluctant to allow subordinates on the audit any freedom of action A B C D E
20. Let some subordinates on the audit have authority which he should keep. A B C D E

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL auditor SHOULD do:

21. Assign particular tasks to subordinates on the audit as opposed to general areas of responsibility A B C D E
22. Make his preferences clear to subordinates on the audit A B C D E
23. Drive hard when a deadline approaches A B C D E
24. Fail to take necessary action A B C D E
25. Where possible, give advance notice of changes in the audit A B C D E
26. Encourage initiative in subordinates on the audit A B C D E
27. Look out for the personal welfare of subordinate audit staffmembers. A B C D E
28. Unilaterally decide how things should be done when he could easily consult with subordinates on the audit A B C D E
29. Promise rewards to subordinates on the audit that he can't deliver A B C D E
30. Let subordinates on the audit know what is expected of them A B C D E
31. Assign the least pleasant audit tasks to the subordinates who fail to perform up to his expectations. A B C D E
32. Discuss new ideas with subordinates on the audit before putting them into action A B C D E
33. Obtain the assistance of the auditor charged with final authority for the engagement whenever necessary in eliminating obstacles facing subordinates on the audit. A B C D E
34. Be easily dissuaded by the client when audit objectives are at stake A B C D E
35. Inspire enthusiasm among subordinates on the audit. A B C D E
36. Take full charge when emergencies arise A B C D E
37. Use threats of overtime work as a punitive instrument to obtain the kind of performance he wants. A B C D E
38. Settle conflicts when they occur among subordinates on the audit A B C D E
39. Allow subordinates on the audit to take advantage of him. A B C D E
40. Delegate areas of responsibility in the audit to specific subordinates and allow them to make all their own decisions A B C D E

A = Always B = Often C = Occasionally D = Seldom E = Never

What the IDEAL Auditor SHOULD do:

41. Make sure that subordinates on the audit know that he is in charge of the field work. A B C D E
42. Needle subordinates for greater effort A B C D E
43. Encourage uniformity in the execution of audit procedures A B C D E
44. Be friendly and approachable A B C D E
45. Schedule the work to be done A E C D E
46. Skillfully coordinate the necessary interaction of subordinates on the audit with the client's employees and with each other. A B C D E
47. Require high productivity from all subordinates on the audit regardless of experience. A B C D E
48. Misuse his authority A B C D E
49. Make pep talks to stimulate subordinates on the audit A B C D E
50. Give the appropriate amount of direction to subordinates on the audit. A B C D E
51. Criticize the work of subordinates on the audit in front of others A B C D E
52. Be able to wait just so long, then blow up A B C D E

APPENDIX F

NAME _____ DATE _____

This is a description of (please check one): My Least Preferred Co-worker _____ Me _____

INSTRUCTIONS: Think of the one person with whom you have worked least well. He or she may be someone you work with now or in the past. You may or may not like this person but well. Describe this person by placing one checkmark on each scale. You may check between boxes as well as within boxes. If you feel that neither term on the scale properly describes the person, or you have no basis for describing the person on that scale, check the midpoint. The farther you go from the middle of each scale toward the end before placing your checkmark, the more you feel the person has the quality described. BE SURE TO CHECK EVERY SCALE. Please describe yourself on the other copy of this form.

- | | | | |
|-------------------------------------|-------|-------|-----------------------------------|
| 1. Pleasant | _____ | _____ | Unpleasant |
| 2. Silent | _____ | _____ | Talkative |
| 3. Spiteful, mean | _____ | _____ | Goodnatured, kindly |
| 4. Helpful, cooperative | _____ | _____ | Frustrating, obstructive |
| 5. Slow, non-energetic | _____ | _____ | Energetic, gungho |
| 6. Tense, anxious | _____ | _____ | Relaxed, unworried |
| 7. Aloof, distant, self-contained | _____ | _____ | Approachable, attentive, sociable |
| 8. Jealous | _____ | _____ | Not Jealous |
| 9. Trustful | _____ | _____ | Suspicious |
| 10. Honest, scrupulous | _____ | _____ | Unscrupulous, dishonest |
| 11. Boring | _____ | _____ | Interesting |
| 12. Stubborn, self-willed | _____ | _____ | Mild, submissive |
| 13. Insistently orderly, meticulous | _____ | _____ | Disorderly, sloppy |
| 14. Efficient | _____ | _____ | Inefficient |
| 15. Gloomy, depressed | _____ | _____ | Cheerful |
| 16. Frank, open | _____ | _____ | Secretive, guarded |
| 17. Trustworthy, responsible | _____ | _____ | Untrustworthy, irresponsible |
| 18. Not intelligent | _____ | _____ | Intelligent |
| 19. Creative, imaginative | _____ | _____ | Non-creative, non-imaginative |
| 20. Considerate, Mature | _____ | _____ | Inconsiderate, demanding |
| 21. Stern, rigid, intolerant | _____ | _____ | Tolerant, adaptable |
| 22. Ambitious | _____ | _____ | Not ambitious |
| 23. Conformist, conventional | _____ | _____ | Non-conformist non-conventional |
| 24. Aggressive | _____ | _____ | Not aggressive |
| 25. Quits easily | _____ | _____ | Keeps trying, persists |

26. Pone-l, tough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Easily upset
27. Adventurous, incautious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cautious, Careful
28. Genuine, Real	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Affected, artificial
29. Crude, boorish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Polished, cultured
30. Independent, self-sufficient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dependent on others
31. High Performance Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Low Performance Standards
32. Bold, self-assured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Timid, Hesitant

NOTE: Please go back and CIRCLE your midpoint checkmarks which were made due to serious doubt or insufficient information. These LPC Scales were compiled by William M. Fox, University of Florida. Many of them are based on the analysis of trait data by Ernest C. Tupes and Raymond E. Christal in Technical Report ASD-1186187.

APPENDIX G

Manager's Rating of Field Work Performance

Audit Team Code Number _____

Directions:

Please complete the following questions with the best choice among the alternatives. Restrict your evaluations to observations and experiences from your firm alone. Do not compare your employees or their work with examples encountered elsewhere. This information will be held in confidence. The field study administrator and one member of the University of Florida Graduate Faculty will have sole access to the completed questionnaire. None of this information will be shared with any of your colleagues, clients, or employees. Any publication of results will exclude names of persons and organizations. Please note that your perceptions and impressions are requested, which need not be based on factual data or certainty.

Indicate your choice for each question by circling the letter representing the answer that is most nearly correct.

- A = Significantly above average for our firm
- B = Slightly above average for our firm
- C = Average for our firm
- D = Slightly below average for our firm
- E = Significantly below average for our firm
- X = No Basis for an answer (not available for Part 4)

1. Supervisor's Evaluation (your impression)

- a. How would you rate the success of the auditor in charge of field work in finishing this audit within the deadline? A B C D E X
- b. How would you rate the success of the auditor in charge of field work in staying within the planned man-hours budget? A B C D E X
- c. How would you rate the success of the auditor in charge of field work in obtaining a suitable level of performance in view of the ability of the assigned staff members? A B C D E X
- d. How would you rate the auditor in charge of field work as a teacher or trainer of staff members while in the field? A B C D E X
- e. How would you rate the success of the auditor in charge of field work in avoiding unnecessary crises? A B C D E X

2. Staff member Satisfaction and Performance (as you perceive it)

- a. What degree of success did the auditor in charge of field work have in maintaining staff members' job satisfaction? A B C D E X
- b. What degree of enthusiasm did the members of this audit team show while serving on the audit? A B C D E X
- c. How successful was this audit team in avoiding internal strife during the audit? A B C D E X

3. Client Satisfaction (as you perceive it)

- a. What kind of impression did the auditor in charge of field work leave with this client? A B C D E X
- b. What kind of impression did the audit team as a group leave with this client? A B C D E X
- c. How would you describe your firm's relations with this client prior to the most recent audit? A B C D E X
- d. How would you describe your firm's relations with this client at present? A B C D E X

4. Overall Evaluation (your impression)

- a. How would you evaluate the overall effectiveness of this team based upon your review of the field work? A B C D E
- b. How effective was the auditor in charge of field work as a leader on this particular audit? A B C D E

APPENDIX H

DIRECTIONS: STAFF MEMBERS

NAME: _____

1. STAFF MEMBER CODE NUMBER

Select any six digit number as your own code number. The only restriction is that the six digits may not all be identical or consecutive. Number selected: _____

Place this number on the first page of each of the three questionnaires that you are to complete: Leader Behavior Description Questionnaire, Audit Staff Member Opinion Survey, and Ideal Leader Behavior.

2. AUDIT TEAM CODE NUMBER

This number identifies the audit team and the auditor in charge of field work on one of your recently completed field engagements. Insert this number on the first page of each form in this set.

<u>Audit Team Code Number</u>	<u>Auditor in Charge</u>	<u>Engagement</u>
-------------------------------	--------------------------	-------------------

3. FINAL INSTRUCTIONS

Tear off this page when you have completed the three questionnaires. You may wish to refer to it to refresh your memory as to the identity of the auditor in charge or audit team being described. After your questionnaires have been submitted, you must destroy this page to insure the confidentiality of this research project.

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

APPENDIX I

DIRECTIONS: AUDITOR IN CHARGE OF FIELD WORK (SUPERVISOR)

1. AUDIT TEAM CODE NUMBER

This number identifies the audit team which you supervised on a recently completed field engagement. Enter this number on each of the attached questionnaires in lieu of your name or where an audit team code number is required.

<u>Audit Team Code Number</u>	<u>Auditor in Charge</u>	<u>Engagement</u>
-------------------------------	--------------------------	-------------------

2. FINAL INSTRUCTIONS

Separate this page from the attached materials. You must retain it and destroy it after completing the questionnaires. The researcher has a similar list of code numbers and it, too, will be destroyed following the collection of the materials, making it impossible to trace the completed questionnaires to any individual or group.

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

APPENDIX J

Manager's Rating of Field Work Performance

Engagement _____

Manager _____

Supervisor (Auditor in Charge of Field Work) _____

Staff Members _____

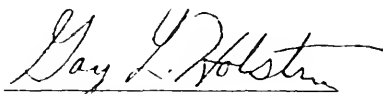
Audit Team Code Number _____

Enter the audit team code number on the attached rating form. When the rating is completed, remove and destroy this identification slip.

BIOGRAPHICAL SKETCH

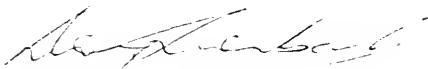
PERSONAL DATA	Born: April 21, 1937 Married: 1 child
EDUCATION	University of California - Berkeley B.S.B.A., 1964 UCLA, M.B.A., 1965 University of Florida, Ph.D., 1980
WORK EXPERIENCE	Laventhol & Co., Los Angeles, Ca., 1965-69. Assistant Professor, Fort Lewis College, Durango, Colorado, 1969-71 Assistant Professor, Virginia Tech., 1976-present
MILITARY SERVICE	United States Army, Lt., Jan. 1959-May 1962

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



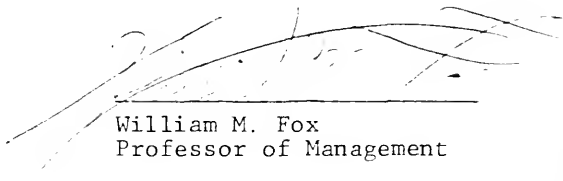
Gary L. Holstrum
Associate Professor
of Accounting

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Doug A. T. Snowball
Associate Professor
of Accounting

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



William M. Fox
Professor of Management

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in cursive script, reading "Frederick O. Goddard", written over a horizontal line.

Frederick O. Goddard
Professor of Economics

This dissertation was submitted to the Graduate Faculty of the School of Accounting in the College of Business Administration and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 1980

Dean for Graduate Studies
and Research

UNIVERSITY OF FLORIDA



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